Day 1
October 6 (Thursday)
Tumor is composed of malignant tumor cells and non-cancerous host cells. The importance of such tumor-host interactions in tumor progression, tumor metastasis and resistance to treatment, has been pointed out for more than 100 years ago. Recent progress in the analysis of intratumor heterogeneity clarified the molecular mechanisms and underlying tumor-host interactions that affect genetic and epigenetic change of tumors. As the tumor heterogeneity limits the therapeutic response, it has now been much attention and trying to develop new drugs targeting the tumor-host interactions. In this Core Symposium 1, we would like to focus on the molecular and cellular mechanisms of tumor-host interplay that cause tumor heterogeneity and resistance to therapy. Tumor-infiltrating endothelial cells, metabolic heterogeneity, tumor stem cell-based heterogeneity, cancer-associated fibroblasts as well as computational simulation of heterogeneity development would be presented by the leading scientists. Basic approaches which elucidate the complexity and the biological significance of the tumor heterogeneity would provide novel therapeutic strategies for refractory cancers.

**CS1-1 The role of tumor-infiltrating endothelial stem cell like cells in anti-angiogenic drug resistance**
Nobuyuki Takakura (Dept. of Signal Transduction, RIMD, Osaka Univ.)
血管内皮幹細胞による腫瘍血管形成と薬剤耐性
高倉 伸幸 (大阪大・微研・情報伝達)

**CS1-2 Tumor cell and stromal cell mediated drug resistance in driver oncogene positive non-small cell lung cancer**
Byohi Kariyama (Div. of Exp. Chemotherap., Cancer Chemistry Ctr., JFCR)
Driver oncogene 陽性肺がんにおける多様な分子標的薬剤性～がんとがん間質細胞が生み出す耐性～
片山 重平（公財）がん研・化療・基礎

**CS1-3 Interaction of genetic alterations and microenvironment during generation of tumor heterogeneity**
Masanobu Oshima (Div. of Genetics, Cancer Res. Inst., Kanazawa Univ.)
ジェネティック変異と微環境の相互作用が誘導するがん悪性化進展大島 正伸 (金沢大・がん研・腫瘍遺伝学)

**CS1-4 Metabolic heterogeneity and plasticity of cancer stem cells**
Ohtera Sampetrean, Shinusuke Shibao, Noriaki Minami, Hideyuki Saya (Div. of Gene Regulation, IAMR, Keio Univ. Sch. of Med.)

**CS1-5 A new model of clonal evolution of colorectal neoplasms devised by multiregional and super computational analysis**
Koshi Mimori1, Atsushi Nitta2, Ryutaro Uchi3, Yusuke Takahashi1, Tomoko Saito1, Satoru Miyano2 (1Dept. of Surg., Kyushu Univ. Beppu Hosp., 2Human Genome Ctr., Inst. Of Med. Sci., The Univ. of Tokyo)
多領域分割検体のスパコン解析により明らかにした大腸腫瘍の新しいクローン進化モデル
三森 功士、新井田 厚司2、内 龍太郎3、高橋 佑佳3、斎藤 衛子2、宮野 悟3（九州大・別府病院、外科学、2東京大・医研・ヒトゲノム解析課）

International Sessions

**IS1-1 Mathematical analysis of the role of CADM1 in the MET-driven resistance against gefitinib in lung adenocarcinoma**
MET遺伝子増幅型gefitsinib耐性肺がんにおける細胞増殖因子CADM1の機能の解明とモデリング
伊東 剛1、大場 基2、鈴木 貴1、村上 善則2（東京大・医研・がん病画像遺伝子、3昭和大・腫瘍分子生物研、2大阪大・基礎工・数理）

**IS1-2 Early Detection of Lung adenocarcinoma via 3D Structure Reconstruction from Low Dose Computed Tomography**
DNA障害薬応答においてプロテアソーム系に制御されるタンパク動態
久米 浩平1-2、郭華 哲3-2（岩手医大・医・外科・分子治療、2岩手医大・医薬総合研）

**IS1-3 Protein dynamics in response to genotoxic drugs regulated by proteasome system**
DNA障害薬応答においてプロテアソーム系に制御されるタンパク動態
久米 浩平1-2、郭華 哲1-2（岩手医科大学・内科・分子治療、1岩手医科大学・薬学総合研）

**IS1-4 Mathematical segmentation methods for visualization and its application and analysis to detecting lesions.**
Keiko Itano (Dept. of Systems Innovation, Engineering Sci., Osaka Univ.)
数学的可視化手法と病変診断への応用 -解析
森野 景子（大阪大・基礎工学・システム工・数理）

**IS1-5 Statistical Modeling for Progression to Cancer, Targeted Therapy and Cure**
Chen-Hsin Chen1 (Inst. of Statistical Sci., Academia Sinica, 2Grad. Inst. of Epidemiology and Prevention Med., Natl. Taiwan Univ.)
統合数理解析学方法
Chen-Hsin Chen1, Satoru Miyano2 (1Inst. of Statistical Sci., Academia Sinica, 2Grad. Inst. of Epidemiology and Prevention Med., Natl. Taiwan Univ.)

**IS1-6 Molecular biomarkers, network biomarkers and dynamical network biomarkers for complex diseases**
Luonan Chen (Shanghai Inst. for Life Sci., Chinese Academy of Sci.)
分子バイオマーカー、ネットワークバイオマーカーと動的ネットワークバイオマーカー

**IS1-7 Statistical Aspects of Omics Data Analysis Using the Random Compound Covariate**
Yu Shyr (Vanderbilt Ctr. for Quantitative Sci., Vanderbilt Univ. Med. Ctr.)
統合数理解析学方法
Yu Shyr (Vanderbilt Ctr. for Quantitative Sci., Vanderbilt Univ. Med. Ctr.)
### IS2-1 Targeting phospholipase D1 attenuates intestinal tumorigenesis by controlling β-catenin signaling

<table>
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<th>Authors</th>
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**Abstract:** Attenuation of β-catenin signaling in colon cancer cells is associated with the phospholipase D1 (PLD1) pathway, which is overactivated in several cancer types. In this study, we analyzed the role of PLD1 in colon cancer progression and identified post-translational modification (PTM) by Plk1 as a mechanism to regulate β-catenin activation. This study provides insights into the regulation of β-catenin signaling and potential therapeutic targets for colon cancer.

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**Keywords:** Phospholipase D1, β-catenin, colon cancer, tumorigenesis.
Lung cancer is the leading cause of cancer death worldwide. Individual therapy based on driver oncogenes and corresponding targeted drugs are available in advanced-stage, non-small-cell lung cancer (NSCLC). In addition, an immune checkpoint inhibitor has been approved for chemo-refractory NSCLC. However, we face several clinical problems. Firstly, cancer develop recurrent disease by acquiring resistance to targeted drugs. While new generation drugs which overcome resistance have been approved for NSCLC with EGFR mutation or ALK translocation, the resistance to these new generation drugs will be also acquired during the treatment. Secondly, clinical benefit of immune checkpoint inhibitors is limited to a population of NSCLC patients and a predictive biomarker for efficacy has not been established. Thirdly, targeted drugs against tumors with driver oncogenes other than EGFR mutation and ALK translocation are not approved for lung cancer in Japan. These problems need to be resolved for improving prognosis of lung cancer.

In this symposium, we invite 5 distinguished speakers and the cutting edge of their researches regarding these clinical problems will be present. We look forward to sharing latest information of lung cancer and enjoy hot and fruitful discussion!
**Japanese Oral Sessions**

**J12-1 Cancer immunology (1): immune modulation**


座長：谷口 智憲(慶應大・医・先端研・細胞情報)

**J-1001 Inhibition of NTRA4 breaks Treg-mediated suppression of anti-tumor immunity**

Sana Hihono, Akiko Yoshimura (Dept of Microbiology and Immunol., Keio Univ. Sch. of Med.)

NTRA4の機能阻害は制御性T細胞を介した抗腫瘍免疫応答の抑制を解除する：

日比野 沙奈、吉村 昭彦（慶應大・医・微生物学免疫学）

**J-1002 An anti-CD4 depletion antibody reverses Treg-induced suppression of DCs while preventing non-specific T cell activation**


抗CD4除去抗体はT細胞を非特異的に活性化することなく制御性T細胞による樹状細胞の抑制を解除する：

上野 悠史、横地 祐司、石渡 義郎、垣安 和宏、伊藤 哲、松島 譲治（東京大学・医学・分子予防医学教室）

**J-1003 IL-6 inhibits accumulation of anti-tumor effector cells into tumor microenvironments and promotes tumorigenesis in vivo**


IL-6は腫瘍微小環境下で腫瘍エフェクター細胞の集積を阻害し腫瘍形成を促進する：

北村 秀光、大野 陽介、豊島 雄二郎、鈴木 精、橋本 真一、池尾 一幸、本間 重紀、川村 秀樹、高橋 典典、武藤 純信（北海道大学医学部）

**J-1004 The anti-SIRPα antibody prevents tumor formation: a novel strategy for cancer therapy**


抗SIRPα抗体を用いた新たながん治療法：

柳田 國彦、村田 隆二、中田 大輔、齋藤 泰之、小谷 歩徳、古森 孝史、松田 一男（神戸大学医学部）

**J-1005 High mobility group box 1 inhibitor augmented anti-tumor T cell response induced by peptide vaccination as co-adjunct**

Kazuki Yokoi, Akira Yamada (Kumamoto Univ. Res. Ctr. for Innovative Cancer Therapy)

HMGB1阻害剤はコアジュントとしてペプチドワクチンで誘導される抗腫瘍免疫を増強する：

和気 加啓子、山田 亮（久留米大学先端医療研究センター）

**J-1006 Targeting FSTL1 is a new approach to treatment of pediatric cancers**

Marina Hennimi, Yamato Ogwara, Masayoshi Toyoura, Kazunori Aoki, Chie Kudo-Saito (National Cancer Center, Pharma Foods)

小児がん治療においてFSTL1阻害が有用である可能性：

花見 真理奈、薫木 大和、豊浦 雅義、田村 一教、工藤 千恵（国立がん研究センター研究所・分子細胞治療）

**English Oral Sessions**

**E12-1 Cancer immunology (2): immunotherapy**

Chairperson: Toshio Kitawaki (Inst. of Hematol. & Oncol., Kyorin Univ. Hosp.)

座長：北条 龍行（京大病院・血液・腫瘍内科）

**E-1001 5-FU (fluorouracil) sensitizes oral squamous cell carcinoma (OSCC) to cytotoxic T-lymphocyte (CTL).**


5-FUは口腔癌の細胞傷害性T細胞に対する感受性を増強する：

鈴木 正道、西尾 貴之、鷲岡 宣隆、上田 直輝（愛知医大・医・腫瘍腫瘍免疫診療科）

**E-1002 HIF-2α inhibitor restores the TRAIL sensitivity of human pancreatic cancer cells**

Harashima Nanay, Yuichi Iida, Mamoru Harada (Dept. Immunol., Shimane Univ. Facult. Med.)

HIFは腫瘍細胞に TRAILの感受性を回復させる：

原崎 奈々江、鶴岡 雄一、原田 守（島根大・医・免疫）

**E-1003 Intratumoral FN-α expression reduces trafficking of Tregs into tumor by inhibition of CCL17 in tumors**


腫瘍内FN-αはCCL17の発現を抑制して制御性T細胞の腫瘍内の浸潤を減少させる：

青木 一教、柴崎 聖陽、鶴岡 雄一、上田 亮介、工藤 千恵、橋本 尚雄（国立がん研究センター・研究・分子細胞治療）

**E-1004 Dectin-2 selectively suppresses liver metastasis of cancer through Kupffer cells**

Yoshiyuki Taniguchi, Masahide Yonemura, Tatsuya Ueda (Inst. of Sci. & Technol., Inst. of the Tokyo Met. for Integrative Immunology)

Dectin-2はクッパ細胞を通じてがん転移を抑制する：

木村 好孝、柳井 秀 Blanc、谷口 嬰綾（東大・生研・炎症免疫制御学、マスクスプランクス東大・統合炎症学）

**E-1005 Modulation of local and systemic immune responses in the progression of ovarian cancer dissemination**


卵巣癌細胞内進展における局所および全身性免疫応答の変動：

戸田 欄里、片口 歩、木葉 敬二、田村 光代、田原 惣、中村 実、藤本 麻人と子、上村 克之、森本 雅人、編集 純（東京大学医学部・女性外科）

**E-1006 IL-6 suppresses Type-1 immune responses in tumor microenvironment and promotes liver metastasis of colon cancer**


IL-6は腫瘍微環境下でタイプ1がん免疫応答を抑制し、大腸がん転移を促進する：

豊島 雄二郎、大野 陽介、鈴木 精、寺田 靖、本間 重紀、川村 秀樹、高橋 典典、武藤 純信、北村 秀光（北海大・医学・消化器外科）

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**Japanese Oral Sessions**

**Room 7**

**Oct. 6 (Thu.) 9:00-10:15**

**J17-1 DDS, combination therapies**

**Chairperson:** Kazuhiro Nomura (Dept. of Gastroenterological Surg., Okayama Univ., Med. Sch.)

座長：野間 和広（岡山大学医・消化器外科）

**J-1007 Inhibitory Effect on Lymphoma Cells Proliferation by Regulating Lipid Metabolism Pathway**


脂質代謝制御によるリンパ腫に対する新たな治療戦略

**J-1008 Validation of cancer therapeutic strategy by mitochondrial delivery of anticancer drugs using mitochondrial DDS**

Yuma Yamada 2, Hideyoshi Harashima 2 (1 Inst. DDS, Sojo Univ., 2 Facul. Pharm, Sci., Sojo Univ.)

ミトコンドリアを標的とするDDSを用いた薬剤耐性癌治療戦略の検証

**J-1009 Validation of an innovative cancer therapy for targeting mitochondria in cancer cells using aminoalcohol drugs**

Jiro Abe 1, Yuma Yamada 2, Hideyoshi Harashima 2 (1 Dept. Pediatrics, Graduate School of Medicine, Hokkaido University, 2 Faculty of Pharmaceutical Sciences, Hokkaido University)

癌細胞ミトコンドリアを標的としたアミノアルコール系薬剤を用いた新規治療戦略の検証

**J-1010 S-Nitrosated Human Serum Albumin Dimer Function as a prominent NO delivery carrier and novel nano EPR Effects augments**


S-ニトロソホモジェルインダミーは優れたNO デリバリーユニット及びEPR増強剤として機能する

**J-1011 S-Nitrosated human serum albumin dimer as novel nano-EPR enhancer applied to macromolecular anti-tumor drugs**


S-ニトロシヒト血清アルブミンデミーは新規ナノEPR増強剤として高分子抗腫瘍剤の治療効果を増強する

**J-1012 S-Nitrosated human serum albumin dimer accelerated the therapeutic effect of albumin bounded anticancer-drug**


S-ニトロショヒト血清アルブミンデミーはアルブミン結合型抗癌剤の治療効果を亢進する

**English Oral Sessions**

**Room 7**

**Oct. 6 (Thu.) 10:15-11:30**

**E17-1 Drug delivery systems**

**Chairperson:** Masahiro Yasunaga (Div. of Developmental Therap., NCC EPOC)

座長：安永 正浩（国立がん研究センター-先端医療開発センター-新薬開発）

**E-1007 Withdrawn**

演題取り下げ

**E-1008 Withdrawn**

演題取り下げ

**E-1009 Effects of FLT3-Specific Peptide-Polymeric Micelle Encapsulated Curcumin on EoL-1 Cell Line**

Singkome Tim 1, Chadarat Ampasavate 2, Siriporn Okonogi 2 (1 Nanoscience Nanotechnol., Grad. Sch., Chiang Mai Univ., Chiang Mai, Thailand, 2 Dept. of Pharm. Sci., Chiang Mai Univ., Chiang Mai, Thailand, 3 Dept. of Pharm. Sci., Sch. of Pharm., Univ. Kansas, USA, 4 Dept. of Med. Tech., Chiang Mai Univ., Chiang Mai, Thailand)

抗原抗体作用を有する新規コマロピキノン誘導体のハイリスク骨髄腫細胞に対するin vivoへの増強抑制作用の検討

**E-1010 Novel Komaroviquinone derivatives with anti-prototοal activity inhibited growth of high-risk myeloma cells in vitro**

Takahiro Yamasaki 1, Daito Ichikawa 2, Arimi Ueda 3, Shuji Aida 4, Maiko Matsushita 1, Yutaka Hattori 2 (Clin. Physiol. & Therap., Keio Univ. Faculty of Pharm.)

抗原抗体作用を有する新規コマロピキノン誘導体のハイリスク骨髄腫細胞に対するin vitroでの増強抑制作用の評価

**E-1011 Comprehensive genetic analysis for the anticancer activity of a novel alkylating agent targeting KRAS mutation**


変異型KRASを標的とした新規アルキル化剤の網羅的遺伝子解析による抗腫瘍効果の検討

**E-1012 Overview of preclinical and clinical pilot studies of HPMA-polymer conjugated T8V having 3 levels of tumor selectivity**

Hiroyuki Maeda 1, Hideaki Nakamura 2, Jun Fang 2 (1 Inst. DDS, Sojo Univ., 2 Facul. Pharm, Sci., Sojo Univ.)

HPMAポリマー結合薬物（P-T8V）は3段階に腫瘍選択的である：前臨床および臨床パイロットステディーのオーバービュー

前田 涼 1, 中村 秀明 2, 方 俊 2 (1 原巣大・DDS 研, 2 原巣大・薬)
**J-1013** Associations between mutational signatures and clinical backgrounds in liver cancer  
Yasushi Totoki, Akihiro Fujimoto, Hiromi Nakamura, Natsuko Hamada, Fumie Hosoda, Yasuhiro Ara, Hitoshi Nakagawa, Tsutsumi Shibata  

肝細胞癌の遺伝子変異のメタゲノミクス．統合生命医科学研究センター．東大．医学科学院．ヒトゲノム解析センター．

**J-1014** The landscape of structural variations revealed by large scale whole exome analysis using Genomon-SV  
Yuichi Shirasagi, Keisuke Kataoka, Kenichi Chiba, Ai Okada, Hideki Makishima, Yasunobu Nagata, Seishi Ogawa, Satoru Miyano  
("Human Genome Ctr., IMS, The Univ. of Tokyo, 8Dept. Path. & Tumor Biol., Kyoto Univ.")  

Genomon-SVを使った大規模エキソーム解析で明らかになった構造変異の全像

**J-1015** Genomic feature of multi-focal hepatocellular carcinoma  
Shogo Yamamoto, Yutaka Midorikawa, Kenji Tatsuno, Hiroki Ueda, Shingo Tsuji, Genta Nagaie, Tatadashi Takayama, Hiroyuki Aburatan  
("Genome Science div., RCAST, The University of Tokyo, 8Dept. Digestive Surg., Nihon Univ. Sch. of Med.")  

多発性肝細胞癌の遺伝子変異と特徴

**J-1016** Immune response-associated gene expression in hypermutated tumors with more than 500 total single nucleotide variants  
Yasuto Akiyama, Akira Iizuka, Takeshi Nagashima, Yuji Shimoda, Tomoe Tanabe, Sumiko Ohnami, Shumpei Ohnami, Keiichi Ohshima, Kenichi Urakami, Masatoshi Kusuhara, Tohru Mochizuki, Ken Yamaguchi  

SNV500以上の高頻度遺伝子変異を伴う腫瘍における免疫応答関連遺伝子の発現解析

**J-1017** POLY mutations in 2000 cancer patients  
Keiichi Hatakeyama, Keiichi Ohshima, Takeshi Nagashima, Shumpei Ohnami, Sumiko Ohnami, Koji Maruyama, Yasuto Akiyama, Kenichi Urakami, Masatoshi Kusuhara, Ken Yamaguchi, Tohru Mochizuki  

2000症例におけるPOLY変異
E-1013 Prognostic implications of genetic alterations from comprehensive genetic profiling in lower grade gliomas
Kosuke Aoki1, Hiromichi Suzuki2, Keitaro Matsuo3, Keisuke Kataoka4, Tepppei Shimamura5, Yasunobu Nagata6, Tetsuichi Yoshizato7, Masashi Sanada8, Satoru Miyano1, Yoshihiko Wakabayashi1, Seishi Ogawa1, Atsushi Natsume1, 2(Department of Neurosurgery, Nagoya University, School of Medicine, 2Department of Pathology and Tumor Biology, Kyoto University, 3School of Medicine, 4Aichi Cancer Center Research Institute, 5Division of Neural Biology, Nagoya University, 6Graduate School of Medicine, Nagoya University, 7Department of Pathology, Nagoya University, School of Medicine, 8Graduate School of Medicine, University of Tokyo)

E-1014 Genetic characteristics of 500 neuroblastomas using genome-wide analysis combined with immunohistochemistry
Kumiko Uryu, Kenichi Yoshida, Keiske Kataoka, Masafumi Seki1, Mitsuru Hizawari, Yasuhide Hayashi, Atsuko Nakazawa, Tetsuya Takimoto, Tatsuro Tajiri, Akira Nakagawa, Satoru Miyano, Seishi Ogawa, Junko Takita (Department of Pediatrics, The University of Tokyo, Department of Pathology and Tumor Biology, Kyoto University, Japanese Red Cross Gunma Blood Center, Department of Pathological Diagnosis, Tokai University, National Center for Child Health and Development, Japan Neuroblastoma Study Group, HICG, the Institute of Medical Science, the University of Tokyo)

E-1015 Exploring Immunome landscape in biliary tract cancer
Asmaa Elzawahry, Yusuhito Nannya, Tatsuro Tajiri, Akira Nakagawa, Satoru Miyano, Mamoru Kato1, Tatsuhiro Shibata2 (Department of Bioinformatics, National Cancer Center Research Institute, Japan, Division of Cancer Genomics, National Cancer Center Research Institute, Japan)

E-1016 Impact of somatic mutations on outcome in patients with MDS after stem-cell transplantation
Tetsuichi Yoshizato, Yusuke Shiozawa, Kenichi Yoshida, Yoshiko Ansuta1, Yushihito Nannya, Hiromichi Suzuki, Keisuke Kataoka, Kenichi Chiba, Yuichi Shiraiishi, Yoshihiko Kanda, Hideki Makishima, Satoru Miyano, Seishi Ogawa (Department of Pathology and Tumor Biology, Kyoto University, Japan, Japanese Data Center for Hematopoietic Cell Transplantation, Nagoya, Japan, Human Genome Center, The University of Tokyo, Tokyo, Japan, Division of Hematology, Jichi Medical University, Saitama, Japan)

E-1017 Landscape of MDS genomes as revealed by whole genome sequencing
Yasuhito Nannya, Kenichi Yoshida, Keiske Kataoka, Tomoki Naoe, Hirosi Kiyoi, Shigeru Chiba, Norio Asou, Yasushi Miyazaki, Hiroko Tanaka, Kenichi Chiba, Yuichi Shiraiishi, Satoru Miyano, Seishi Ogawa (Kyoto University, Department of Pathology and Tumor Biology, Nagoya Medical Center, Nagoya University, Department of Hematology, Tsukuba University, Department of Pathology, Saitama Medical University, International Medical Center, Nagasaki University, Atomic Bomb Institute, Tokyo University, IMSUT, HICG)

E-1018 Systematic phenotyping of novel tumor-specific mutations in receptor tyrosine kinases detected in 1,685 cancer patients
Masakuni Serizawa1, Takeshi Nagashima2, Juji Shimoda3, Shumpei Ohnami4, Sumiko Ohnami, Keichi Ohshima, Tohru Mochizuki, Takashi Nakajima, Kenichi Urakami, Masatoshi Kusuhara, Ken Yamaguchi (Drug Discovery & Development Division, Shizuoka Cancer Center Research Institute, Cancer Diagnostics Research Division, Shizuoka Cancer Center Research Institute, SRL Inc., Medical Genetics Division, Shizuoka Cancer Center Research Institute, Pathology Division, Shizuoka Cancer Center Research Institute, Shizuoka Cancer Center)
**Japanese Oral Sessions**

**J14-1**

**Diagnosis and treatment model of hepatobiliary-pancreatic cancer**


座長：加藤 俊介（順天堂大・医・腫瘍内科）

**J14-1-1**

**Cancer genome evolution in early hepatocellular carcinoma and premalignant lesions**

Japanese Oral Sessions

**J1025**

**Functional analysis of Zyxin in DU145 prostate cancer cell behavior (II)**


**DU145 前立腺癌細胞の挙動における Zyxin の機能的解析 (II)**

山本 正一, 酒沼 里菜, 坂本 幸彦, 丸山 誠, 徐 茜, 堀 恵樹, 上村 博史, 石黒 彦也, 北野 亜也, 新田 邦氏, 渡邉 昌俊 (1) 横浜国大院, 工研工, 医工学, 2) 横浜大工, 理工, 3) ソウル大, 医, 生体医学科, 4) 梅田大学, 医, 5) 横浜市大, 6) センターパネル, 医療標株, 7) 医療器, 8) 横浜市大院, 9) 医療器, 10) 神奈川科学技术アカデミー (光学体ゲー"
E1025 VHL-deficient renal cancer cells gain resistant to apoptosis inducers by activating AKT through the IGF1R-PI3K pathway
Ryuji Yamaguchi (Kansai Medical University Dept of Anesthesiology) VHLсоединaires expressing a mutant that can activate p21 or p53, and in the absence of VHL, HIF-1α transcriptional activity is activated, leading to cell cycle arrest and apoptosis. These findings suggest that the VHL/PI3K/AKT pathway is involved in the resistance of renal cancer cells to apoptosis inducers.

E1026 Cancer stem cell characteristics and aldehyde dehydrogenase activity in mTOR inhibitor-resistant kidney cancer cells
Kazuyuki Numakura, Jean-Christophe Pignon, Jesse Novak, Chibayama et al. (1) The characteristics of cancer stem cells (CSCs) and their role in the development of drug resistance in kidney cancer are investigated. (2) The aldehyde dehydrogenase (ALDH) activity of CSCs was measured using a live cell ALDH assay kit. The results showed that CSCs with high ALDH activity had a higher survival rate after treatment with mTOR inhibitors than those with low ALDH activity. These findings suggest that the ALDH-positive CSCs play a critical role in the development of drug resistance in kidney cancer.

E1027 Noncoding RNA expression profiling in a mouse model of VHL-deficient renal cancer
Kohei Miyazono, Shogo Ehata, Kazuhiro Yoshikawa, Kyosuke Matsuzaki, and Keisuke Kanamori (1) The expression of noncoding RNAs in VHL-deficient renal cancer cells was analyzed using microarray technology. The results showed that the expression of a specific set of noncoding RNAs was upregulated in VHL-deficient renal cancer cells. These noncoding RNAs may play a role in the development of renal cancer and its resistance to therapy.

E1028 Is splicing linked to tumor heterogeneity? A prostate cancer case study
Yoshihide Hidaka, Anna Sedukhchina, and Koutaro Ueda (1) The case study of a patient with prostate cancer who underwent radical prostatectomy is presented. The patient was found to have tumors with different genotypes and histological characteristics. The results suggest that the heterogeneity of prostate cancer tumors may be related to the splicing of mRNA.
E-1037  Prolonged exposure to TGF-β stabilizes stem-cell state of breast cancer cells through activation of Akt signaling
Yoko Katsumoto1, Kohiti Miyazato1, Rik Derynck1 (Dept. Pathol., Grad. Sch. Med., Univ. of Tokyo, 1Dept. Cell & Tissue Biol., UCSF)

E-1038 A single miRNA rescues EBF1 deficiency in B cell development partly through TGF-β pathway

E-1039 Interchangeable differentiation in spheroids derived from mixed small cell carcinoma/adenocarcinoma of uterine cervix
Satoshi Kubota1 (Osaka Medical Center for Cancer and Cardiovascular Diseases Biochemistry Department, 2Osaka Univ. Grad. Sch. Med.)

E-1040 Identification of six genes that regulate side population of ovarian cancer through a functional genomics screen
Koji Yamanoi1, Noriomi Matsumura, Kazuhiro Suzuki, Ken Yamaguchi, Yuki Ohkawa1, Takanori Eguchi1, Hiroaki Okuyama1, Kiyoshi Yoshino2, Tadashi Kimura2, Masahiro Chou1,3, Keiko Furukawa1, Yuhsuke Ohmi3, Atsushi Natsume2, Toshihiko Kakita1,3, Junichiro Ikeda, Eiichi Morii (Dept. Pathol, Osaka Univ., 1Dept. Pathol., Tokai Univ., 2Dept. Pathol., Tokyo Sch. of Med., 3Dept. Hemat./Ont., Tokai Univ., Sch. Med.)

E-1041 MZF1 and SCAND1 control EMT, oncogenic kinase pathways and molecular chaperone expression in prostate cancer cells
Takanori Eguchi1, Lang Ben1,3, Thomas Prado1, Chiharu Sogawa1, Yuka Okusha1,3, Gray Phillips1, Kiyoshi Kozaki1, Calderwood Stuart1 (Dept. of Radi. Onc., BIDMC, Harvard Med. Sch., 2Okayama Univ. Grad. Sch. of Med. & Pharm. Sci., 3NCGC)

E-1042 Identification of GD3-regulated genes in GD3-expressing gliomas

J-1031 Adaptive response of C6 glioma stem cells to iron deprivation through macrophage induction
Koichi Tabu1, Wenzian Wang2, Yoshibata Murota3, Tetsuya Taga4 (Dept. of Stem Cell Regulation, Tokyo Med. & Dent. Univ.)

J-1032 Enhancement of cancer stem cell signatures in cholangiocarcinoma organoids under glucose deprivation
Nao Yoshikawa1, Yoshimasa Saito, Hidetugu Saito (Div. of Pharmacotherap., Keio Univ. Faculty of Pharm.)

J-1033 Feedback regulation between NADPH oxidase and mTORC1 contributes to the maintenance of the stemness of colon cancer

J-1034 CXCL12-CXCR7 signaling in lymphoplasmacytic lymphoma
Narski Wada1, Junichiro Ikeda1, Eiichi Morii1 (Dept. Pathol., Osaka Univ., 2Grad. Sch. Med.)

J-1035 Efficient targeting malignant phenotypes of glioma by disrupting their energy balance
Masahiko Kobayashi1, Mohamed Ahmed1, Daisuke Yamada1, Susumu Kohno1, Tomoyoshi Soga1, Chiaki Takahashi1, Atsushi Hiro1 (Cancer Res. Inst., Kanazawa Univ., 2Inst. for Advanced Biosciences, Keio Univ.)

J-1036 Identification of stemness-maintaining factors in cancer stem cells
Takahiko Murayama1, Tatsunori Nishimura2, Kana Tominaga1, Asuka Hasegawa2, Masahiko Kobayashi1, Mohamed Ahmed1, Kohei Yano2, Koichi Tabu1, Koichi Tada2, Arinobu Tojo1, Noriko Gotoh1 (1Div. Mol. Therapy, IMS, Univ. of Tokyo, 2Div. Cancer Cell Biol., Cancer Res. Inst., Kanazawa Univ., 3NCI)

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J-1042 Identification of GD3-regulated genes in GD3-expressing gliomas
Cancer stem cell (2)

Chairperson: Masao Saitoh (Ctr. for Med. Sci., Grad. Sch. of Med. Univ. of Yamanashi)
座長：齋藤 正夫（山梨大学・医・医学系）

E-1043
NFYA regulates multistep process of cancer heterogeneity formation


NFYAは癌の不均一性構築過程を段階的に制御する

E-1044
Heterogeneity of tumor cells in the bone microenvironment; mechanisms and therapeutic targets of bone metastasis

Mitsuru Futakuchi, Katsumi Fukamachi, Masumi Suzuki (Dept. of Molecular Toxicology, Nagoya City Univ. Med. Sch.)

骨微小環境におけるがんの不均一性；骨転移の増殖メカニズムと治療標的因子

E-1045
Targeting Mesenchymal Transition: from Breast Cancer to Glioblastoma

Kiyotsugu Yoshikawa, Yoshiuki Arakawa, Junya Toguchida, Masakazu Fujita (1Dept. Brain Surgery, 2Kanazawa Univ., 3OncoMedicine, 4Dept Breast Surgery, Kyoto Univ. Grad. Sch. Med.)

間質転換解による難治性がん治療法の開発

E-1046
CD44 standard from supports the acquisition of CSC properties through the EMT induction in oral cancer cells


頭頸部がんにおけるCD44を介した上皮間質転換誘導機構の解明

E-1047
Metastatic potentials and expressions of CD44 isoforms in hepatocellular carcinoma stem-like sphere cells


肝細胞癌幹細胞のSPHERE細胞における転移能亢進及びCD44アイソフォーム発現

S2
ncRNAs: A new paradigm in cancer pathogenesis, diagnosis and therapy


Non-coding RNAs (ncRNAs), especially miRNAs (miRNAs) and long ncRNAs (IncRNAs), are regulatory molecules involved in a broad range of biological processes. Some ncRNAs have been implicated in cancer, most notably oncogenic miRNAs (Onco-miRs) and tumor suppressor miRNAs (TS-miRs), and are potential targets for cancer therapies. Oligonucleotide-based therapies have faced many challenges due to enzymatic degradation, poor internalization and other problems, but improved delivery strategies, such as the use of PEGylated polymer complexes, may hold promise. miRNAs can also serve as cancer biomarkers, and one reliable source of these markers found in body fluids is exosomes, which function as versatile intracellular communication vehicles. It has also been shown that IncRNAs play important roles in the tumorigenicity of cancer cells. For example, the GSEC IncRNA has been shown to be associated with colon cancer cell migration. Various “omics” approaches have elucidated the roles of IncRNAs in cancer pathology. Another interesting finding is the role of double-strand RNA (dsRNA) processing/signaling in immunometabolic regulation in obesity, which is closely associated with cancer initiation. Here, experts in the field will present the latest cutting-edge research on the roles of ncRNAs in cancer.

S2-1
Identification of novel tumor-suppressor microRNAs and their application for cancer diagnosis and therapeutic strategies


S2-2
Application of senescence-inducible microRNAs for cancer therapy

Hidetoshi Tahara (Grad. Sch. of Biomed. Sci, Hiroshima Univ., Dept. of Cell & Mol. Biol.)

S2-3
Exosomes as a novel delivery cargo of cancer pathogenic components


S2-4
Polymer nanotechnology-based nucleic acid delivery

Kanjiro Miyata, Kazunori Kataoka (1Dept. of Mater. Eng., Grad. Sch. of Eng., The Univ. of Tokyo, 2iCONM)

High molecular weight RNAs and siRNAs can be delivered using polymer nanotechnology-based nucleic acid delivery. However, it is known that the nano-sized complexes form to prevent aggregation, which limits their delivery efficiency. This talk will present the latest research on this topic.

S2-5
The Novel G-quadruplex-Containing IncRNA GSEC Modules Colon Cancer Cell Migration

Yoshiozki Kawasaki, Tetsu Akiyama (Inst. Mol. Cell. Biosci., The Univ. of Tokyo)

G2M arrest is required for the development of new strategies based on RNAi. The development of new strategies for cancer treatment is therefore a major goal. This talk will present the latest research on this topic.

S2-6
Non-coding RNA-mediated regulation of genes that are crucially involved in the carcinogenesis of lung cancer

Takahisa Takahashi (Div. of Mol. Carcino., Nagoya Univ. Grad. Sch. of Med.)

Non-coding RNA (ncRNA) has been shown to play a role in the carcinogenesis of lung cancer. This talk will present the latest research on this topic.
Symposia

S3-1 Overview of the basic research of hereditary cancer
Yoshinori Murakami (Div. of Mol. Pathol., Inst. Med. Sci., The Univ. of Tokyo)

S3-2 Recent advances and further challenge in hereditary breast and ovarian cancer (HBOC) syndrome
Natsuko Chiba (Dept. of Can. Biol., IDAC, Tohoku Univ.)

S3-3 Analysis of the pathogenesis of familial colon cancer by next generation-sequencing

S4-1 Targeting Non-coding RNA as a Novel Therapeutics for Human Cancers
Yutaka Kondo (Dept. of Epigenomics, Nagoya City Univ., Grad. Sch. of Med.)

S4-2 Reference Component Analysis of Single Cell Transcriptsomes Reveals Cellular Heterogeneity in Colon Cancer
Shyam Prabhakar (Computational & Systems Biol., Genome Inst. of Singapore)

S4-3 Histone Lysine Demethylase Inhibitors for Cancer Therapy
Takayoshi Suzuki (Grad. Sch. of Med. Sci., Kyoto Pref. Univ. Med.)

S4-4 Optimization of DNA hypomethylating therapy and marker development for patient selection in solid tumors

S4-5 Epigenetic remodeling of cancer associated fibroblasts through BET inhibition suppresses pancreatic cancer progression
Keisuke Yamamoto, Keisuke Tateishi, Takuma Nakatsuka, Yasuo Tanaka, Hedeaki Iijichi, Norihiro Kokudo, Masashi Fukayama, Kazuhiko Koike (Dept. of Gastroenterology, The Univ. of Tokyo, 2Hepato-Biliary-Pancreatic Surg. Div., 3Dept. of Surg., The Univ. of Tokyo, 3Dept. of Path. & Diagnostic Path., The Univ. of Tokyo)

S4-6 Novel therapeutic strategies targeting epigenetic regulators that are critical for maintenance of acute myeloid leukemia

Yoshinori Murakami (Div. of Mol. Pathol., Inst. Med. Sci., The Univ. of Tokyo)

Hereditary cancers are the group of cancers with low incidence in population but with very high risk of cancer development. Following the "Angelina effect" of hereditary breast and ovarian cancer (HBOC), hereditary cancer has come to draw a lot of attention both socially and medically in Japan as well as in USA. The innovation of genome technology has led to the search for new responsible genes of the hereditary cancers and the enrichment of database as powerful tools of the management of hereditary cancer. As a result, genomic medicine is now set to develop novel approaches to diagnosis and treatment of hereditary cancers by applying the genomic information. The synthetic lethal therapy with PARP inhibitors has been demonstrated to be effective for the HBOC patients, while the anti-PD-1/PD-L1 antibody drugs have been shown to be effective for Lynch syndrome, leading to the paradigm shift of hereditary cancer treatment. To apply such outstanding findings to the management, it is necessary to build a comprehensive medical care system for hereditary cancers, including examination of the ethical aspects and the legal restrictions related to the handling of genomic information. In this session, we will introduce the basic and clinical studies and the current situations of ELSI on hereditary cancers and discuss the precision medicine of hereditary cancer in Japan.

Yoshinori Murakami (Div. of Mol. Pathol., Inst. Med. Sci., The Univ. of Tokyo)

遺伝性腫瘍の基礎研究の進歩
村上善則（東京大・医科研・人癌基因遺伝子）

S3-1 Overview of the basic research of hereditary cancer
Yoshinori Murakami (Div. of Mol. Pathol., Inst. Med. Sci., The Univ. of Tokyo)

遺伝性腫瘍の基礎研究の進歩
村上善則（東京大・医科研・人癌基因遺伝子）
E-1048 EMT in lung adenocarcinoma promotes the matrix remodeling of cancer-associated fibroblasts driving cancer cell invasion Shinya Nishi1, Tomoyuki Miyashita1, Hiroko Hashimoto1, Toshi Menju1, Tomomi Nakahara1, Masatoshi Fujita2, Tohru Kiyono1, Jun Nishida1, Shogo Ehata, Kohei Miyazono1

E-1050 CAFs boost mammary cancer metastasis via increasing the cell-cell adhesion Akira Orimo1, Nadila Wali1, Yasuhiro Ito1, Okio Hino1, Kazuyoshi Takeda1, Michiaki Hamada1, Yuko Matsumura1

E-1051 Simvastatin inhibits acidic extracellular pH signaling through RhoA-PLD1 axis in mouse B16-BL6 melanoma cells Yasumasa Kata1, Yukio Nishimura1

E-1052 The role of hyaluronan in pancreatic cancer biology and therapy Northiro Sato, Shiro Kohi, Atsuhiko Koga, Keiji Hirata1

E-1053 ADAM9 promotes esophageal squamous cell carcinoma metastasis via suppression of plasminogen activator inhibitor 1 Yuh-Ping Shen1, Yu-Sen Lin1, Shih-Ting Bai1, Ting-Ting Kuo1, Guan-Chin Tseng1, Wei-Chao Chang1

E-1054 Two Prx1 isoforms facilitate metastasis with cancer stem cell functions in pancreatic cancer. Shigetomo Takeshi1, Hideyuki Yoshimoto1, Shingo Kagawa1, Kensa Suzuki1, Masayuki Obata1, Masaru Miyazaki1, Yuichi Ohba1

E-1055 Decreased expression of Betaglycan promotes renal carcinoma metastasis through a multiple mechanism Jun Nishida, Shogo Ehata, Kohei Miyazono1, Yuji Fujimoto2, Emi Ito1, Shinya Watanabe1, Kentaro Sembata1

E-1056 Establishment of the screening system for identification of cancer-related genes enhancing cell migration and invasion Soichiro Seino1, Jiro Fujimoto2, Emi Ito1, Shinya Watanabe1, Kentaro Sembata1

E-1057 AKR1C1 mediates bladder cancer metastasis and drug resistance Masumi Tsuda1, Ryuuji Matsumoto1, Kazuhiko Yoshida1, Mishie Tanino1, Taichi Kimura1, Hiroshi Nishihara1, Takashige Abe1, Nobuo Shinohara1, Katsuya Nonomura1, Shinya Tanaka1, Kohei Miyazono1, Jun Nishida1

E-1058 Sal-like 4 (SALL4) promotes cell migration through up-regulation of integrin genes in basal-like breast cancer cells Junji Irou1, Sunao Tanaka, Fumiaki Sato, Masakazu Toi1, Daizo Koinuma1, Kohei Miyazono1

E-1059 ZEB1 associated secretory phenotype in breast cancer cells Yusuke Tamura1, Aihiro Katsura1, Masato Morikawa1, Anna Mizutani2, Anna Mizutani2, Daizo Koinuma1, Kohei Miyazono1

E-1060 Establishment of the screening system for identification of cancer-related genes enhancing cell migration and invasion Soichiro Seino1, Jiro Fujimoto2, Emi Ito1, Shinya Watanabe1, Kentaro Sembata1

E-1061 Simvastatin inhibits acidic extracellular pH signaling through RhoA-PLD1 axis in mouse B16-BL6 melanoma cells Yasumasa Kata1, Yukio Nishimura1

E-1062 The role of hyaluronan in pancreatic cancer biology and therapy Northiro Sato, Shiro Kohi, Atsuhiko Koga, Keiji Hirata1 (Dept. of Surgery I, University of Occupational and Environmental Health)

Luncheon Seminars 11:50-12:40

Room 2

**LS1** OncoTherapy Science, Inc.
オンコセラピー・サイエンス株式会社

The Promise of Immunopharmacogenomics to Improve Cancer Treatment
Jae-Hyun Park, D.V.M., Ph.D. (Assistant Professor, Section of Hematology/Oncology, The University of Chicago)
Chair: Toyomasu Katagiri, Ph.D. (Division of Genome Medicine, Institute for Genome Research, Tokushima University)

Room 3

**LS2** Scrum Inc.
株式会社スクラム

“Liquid Biopsy”: Real-Time Personalized Molecular Medicine For Monitoring CTC and cfDNA In Cancer Patients
Dave S.B. Hoon (Professor, Director of Molecular Oncology, John Wayne Cancer Institute)
Chair: Tomoshi Kakeya (Director, Science & Technology, Scrum Inc.)

Room 4

**LS3** Nippon Becton Dickinson Company,Ltd.
日本ベクトン・ディッキンソン株式会社

What do tumor infiltrating lymphocytes say?
Yosuke Tobashi,M.D.,Ph.D. (Division of Cancer Immunology, Exploratory Oncology Research and Clinical Trial Center, National Cancer Center)
Chair: Hiroyoshi Nishikawa,M.D.,Ph.D. (Division of Cancer Immunology, Exploratory Oncology Research and Clinical Trial Center, National Cancer Center)

Room 5

**LS4** Merck Ltd.
メルク株式会社

Drug delivery based on biofunctional peptide-modified exosomes for cancer targeting - exploitation of Guava easyCyte for detection of exosomal functionality -
Ikuhiko Nakase Ph.D. (Nanoscience and Nanotechnology Research Center, Osaka Prefecture University)
Chair: Naoki Hata, Ph.D (Marketing, Life Science, Merck Ltd.)

Room 6

**LS5** Illumina K.K.
イルミナ株式会社

1. Expansion of the utility of FFPE by a new RNA-seq method.
2. Variant detection analysis in FFPE samples using Capture Sequencing Technology
1. Shintaro Kohnaka M.D., Ph.D. (Department of Medical Genomics, Graduate School of Medicine, The University of Tokyo)
Chair: Hironao Fujii (Regional Marketing, Illumina K.K.)

Room 7

**LS6** Sysmex Corporation
シスメックス株式会社

Liquid Biopsy by BEAMing and Plasma Safe-SeqS
Frank Diehl Ph.D. (Sysmex Inostics, Inc.)
Chair: Hiroyoshi Watanabe (Professor, Department of Medical Oncology, Hokkaido University)

Room 8

**LS7** Agilent Technologies Japan, Ltd.
アgilent・テクノロジー株式会社

1. Mutation profiles of lung adenocarcinomas using HaloPlex HS molecular barcodes system
2. Demand Precision: NGS molecular barcoding technology enables more accurate panel sequencing
1. Shuta TOMIDA (Department of Biobank, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University)
Chair: Hiroya Munakata (Professor, Department of Medical Oncology, Hokkaido University)

Room 9

**LS8** OncoTherapy Science, Inc.
オンコセラピー・サイエンス株式会社

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Jae-Hyun Park, D.V.M., Ph.D. (Assistant Professor, Section of Hematology/Oncology, The University of Chicago)
Chair: Toyomasu Katagiri, Ph.D. (Division of Genome Medicine, Institute for Genome Research, Tokushima University)

Room 10

**LS9** Scrum Inc.
株式会社スクラム

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Dave S.B. Hoon (Professor, Director of Molecular Oncology, John Wayne Cancer Institute)
Chair: Tomoshi Kakeya (Director, Science & Technology, Scrum Inc.)

Room 11

**LS10** Nippon Becton Dickinson Company,Ltd.
日本ベクトン・ディッキンソン株式会社

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Chair: Hiroyoshi Nishikawa,M.D.,Ph.D. (Division of Cancer Immunology, Exploratory Oncology Research and Clinical Trial Center, National Cancer Center)

Room 12

**LS11** Merck Ltd.
メルク株式会社

Drug delivery based on biofunctional peptide-modified exosomes for cancer targeting - exploitation of Guava easyCyte for detection of exosomal functionality -
Ikuhiko Nakase Ph.D. (Nanoscience and Nanotechnology Research Center, Osaka Prefecture University)
Chair: Naoki Hata, Ph.D (Marketing, Life Science, Merck Ltd.)

Room 13

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Chair: Hironao Fujii (Regional Marketing, Illumina K.K.)

Room 14

**LS13** Sysmex Corporation
シスメックス株式会社

Liquid Biopsy by BEAMing and Plasma Safe-SeqS
Frank Diehl Ph.D. (Sysmex Inostics, Inc.)
Chair: Hiroyoshi Watanabe (Professor, Department of Medical Oncology, Hokkaido University)

Room 15

**LS14** Agilent Technologies Japan, Ltd.
アgilent・テクノロジー株式会社

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Chair: Hiroya Munakata (Professor, Department of Medical Oncology, Hokkaido University)

2. Fumiko Yoshizaki (Agilent Technologies Japan, Ltd.)

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Chair: Hiroya Munakata (Professor, Department of Medical Oncology, Hokkaido University)

2. Fumiko Yoshizaki (Agilent Technologies Japan, Ltd.)
Symposia

Room 1
Oct. 6 (Thu.) 12:50-15:20

S5 Development of the molecular-targeting drugs and their application to the clinical medicine
分子標的治療薬の開発と臨床への応用を目指して

Chairpersons: Koichi Hagiwara (Jichi Med. Univ., Pulmonary Med.)
Minoru Yoshida (RIKEN CSRS)

座長：萩原 弘一（医大・呼吸器内科）
吉田 稔（理研・環境資源）

Over the past two decades, an ample repertoire of molecular-targeting drugs has been developed, and great success in therapy for cancers that express target molecules have been achieved. However, challenges still remain to improve the efficacy of treatment by developing novel drugs that target key molecules in refractory cancers including molecules involved in metastasis, drug resistance, and cancer stemness. This symposium portrays a flowchart for the development of novel molecular-targeting drugs. The chart begins from the exploitation of seed molecules and leads to their clinical applications. We emphasize an important role for initiatives by academic investigators, and discuss how they can cooperate to establish novel cancer treatments.

S5-1 Targeting adaptive pathways in metastatic treatment-resistant prostate cancer
Owen N. Witte (Dept. of Microbiology, Immunol. & Mol. Genetics, UCLA)

S5-2 Targeting acute myeloid leukemia with genetic complexity and heterogeneity
Fumihiko Ishikawa (Lab. for Human Disease Models, RIKEN IMS)
急性骨髄性白血病のゲノム複雑性と分子標的治療

S5-3 Targeting novel function of hTERT and its clinical application
Kenkichi Masutomi (Natl. Cancer Ctr., Res. Inst., Div. of Cancer Stem Cell)
hTERT の新規機能を標的とした抗がん戦略とその臨床応用

S5-4 A RapID way to discover pseudo-natural peptides for cancer therapeutic uses
Hisao Suga (Dept. of Chem., Science, The Univ. of Tokyo)
がん標的に対する特殊ペプチド創薬

S5-5 Mechanism of resistance to EGFR-TKI in lung cancer with EGFR mutation and therapeutic strategy to overcome resistance.
Makoto Maemondo (Dept. of Respiratory Med., Miyagi Cancer Ctr.)
EGFR 転移子変異肺癌に対するチロシンキナーゼ阻害薬の耐薬性機序と耐性克服戦略

S5-6 Investigator-initiated GCP-based clinical trials for new drug development in Japan
Isamu Okamoto (Res. Inst. for Diseases of the Chest, Kyushu Univ.)
日本におけるアカデミア発新薬開発における医師主導治療の役割

Special Symposia

Room 1
Oct. 6 (Thu.) 15:30-18:00

SS1 我が国のがん研究：その歴史と未来

Chairpersons: Hitoshi Nakagama (Natl. Cancer Ctr.,) Kohei Miyazono (Dept. of Mol. Path., Grad. Sch. of Med., The Univ. of Tokyo)

座長：中島 昇（国がん研究）
宮薗 実平（東京大・院医・分子病理学）

我が国のがん研究は、20 世紀初頭に山根らによって発がん研究において世界最良の成果が発表されたことを皮切りに、がん遺伝子、がん抑制遺伝子の研究が進み、がんの治療法の研究が幅広に進展し、これまでに世界に冠たる業績を挙げ、国際的にもがん研究の発展に大きく貢献して来た。がんの発症、治療、予防について、限られた範囲で研究が進展している。一方で、2000 年代からの分子生物学研究の急速な進歩により、基礎研究の分野ではサイトカインの分野などで世界を大きくリードする成果が日本初で発表されて来たことは世界でも広く知られている。また、がんの治療の発展により、がんの発症や進展に関わる種々のがん遺伝子、がん抑制遺伝子の役割が次々と解明されて来た。近年は、基礎研究の成果をいかに臨床応用へと導入して行くかが日本がん学会における重要なテーマである。受講者の皆様に対して、本シンポジウムでは、各組織の発表を経て、がん研究の発展について、4 名の先生方にご発表いただき、日本がん研究の歴史と未来について議論する場を作りたい。本シンポジウムが若手研究者にとってがん研究を夢に抱いてもらえるような議論の場となることを期待したい。

SS1-1 Our Oncogene Study: from Isolation of Mutants of Avian Sarcoma Virus to Discovery of ErbB Family
Kumao Toyoshima (RIKEN)

がん遺伝子研究夢を始めるからerbBの発見へ

SS1-2 Molecular mechanism of apoptosis
Shigekazu Nagata (Lab. of Biochem. & Immunol., IFReC, Osaka Univ.)

アポトーシス分子機構の解明とその生理作用

SS1-3 Along with the genome era; from cloning of APC gene to drug development
Yusuke Nakamura (Dept. of Med., Univ. of Chicago)

ゲノム研究と共に歩んで：APC 発見から抗がん剤開発へ

SS1-4 Research progression of adult T cell leukemia/lymphoma since 1975
Byouko Ueda (Dept. of Tumor Immunology, Aichi Med. Univ. Sch. of Med.)

成人T 細胞白血病：発見とその治療

上田 龍三（愛知医大・医・腫瘍免疫）
International Sessions

Room 2 Oct. 6 (Thu.) 12:50-15:20

IS3 Clinical sequencing with NGS panel for precision medicine

NGSを用いたクリニカルシーケンスによるprecision medicine構築

Chairpersons: Atsushi Ohtsu (NCC-EPOC)
Patrick Tan (Duke-NUS Med. Sch./Cancer Sci. Inst. of Singapore)

Recent progress on genome analyses with next generation sequencer (NGS) panel has established a possible genome-based treatment approach in some oncology areas. However, various issues still remain in clinical implication of this approach: approval of the panel, quality control of the analysis, curation/annotation procedure, how to select an adequate agent, are on discussions in this regard. Which is suitable for clinical sequencing, target sequencing with NGS panel or whole exome/genome analysis, is another question. For establishing precision medicine, it is mandatory to collect and integrate big genome/cellular data from all over the world.

In this session, 6 speakers, 3 from Asian country and 3 from Japan, will present their experiences in clinical sequencing including the above issues. Future international collaborations are anticipated to achieve a real precision medicine in the world.

IS3-1 SCRUNG-Japan data commons sharing clinico-genomic information for development of novel cancer therapies

Katsuura Tsuchihara (Div. of Translational Res., NCC-EPOC)

IS3-2 Moving NGS into Clinical Implementation : The Singapore Experience

Patrick Tan (Duke-NUS Med. Sch./Cancer Sci. Inst. of Singapore)

IS3-3 Clinical implication of intrinsic subtypes and somatic mutations in colon cancer

Soonmyung Park (Nussey Univ. Coll. of Sci. & NSABP Foundation/NSRG Oncology)

IS3-4 Mutational panel for following clonal evolution in myelodysplastic syndromes

Hideki Makishima, Tetsuichi Yoshizato, Kenichi Yoshida, Yasunobu Nagata, Mikka Sekeres', Yusuke Okuno, Yuichi Shiraishi, Shiugeru Chiba, Satoru Miyano, Lee-Yung Shih, Torsten Haferlach, Seishi Ogawa, Jaroslav Maciejewski (Dept. of Path. & Tumor Biol., Kyoto Univ., Cleveland Clinic, Human Genome Ctr., Inst. Med. Sci., The Univ. of Tokyo, Dept. of Hematology, Faculty of Med., Univ. of Tsukuba, Div. of Hematology-Oncology, Chang Gung Univ., Munich Leukemia Lab.)

Bone marrow aspirations are performed at regular intervals during the disease course. A new method other than old two-color FISH may be needed to investigate the clonal evolution of MDS. The depth and breadth of genetic alterations will be required for a better understanding of the disease. The recent update of the WHO classification of myeloid neoplasms with emphasis on MDS has been published. To establish a new consensus classification, we will need comprehensive data and a wider collaboration.

IS3-5 Computational Challenges in IMSUT's Artificial Intelligence-based Clinical Sequencing

Seiya Imono (Clinical Sequencing Team IMSUT / Health Intelligence Ctr., Inst. Med. Sci., The Univ. of Tokyo, Inst. Med. Sci., The Univ. of Tokyo)

East Asia Research in the International Society of Medical Informatics and Bioinformatics (IMSUT) is a leading society in the field of medical informatics and bioinformatics. The IMSUT has been organizing international conferences and workshops in the field of medical informatics and bioinformatics since its establishment in 2001. The aim of the IMSUT is to promote the development and use of medical informatics and bioinformatics to improve the quality of medical care and health outcomes.

IS3-6 Using Diagnostic Whole Genome analysis to stratify treatment of Recalcitrant Cancers

Sean Grimmond (The Univ. of Melbourne Ctr. for Cancer Res.)

International Sessions

Room 3 Oct. 6 (Thu.) 12:50-15:20

IS4 Advances in Drug Delivery System (DDS)

Chairpersons: Nobuhiro Nishiyama (Chemical Resources Lab., Tokyo Inst. of Tech.)
Won Jong Kim (Ctr. for Self-assembly & Complexity, IBS)

Recent advances in biotechnology allow to develop various functional molecules including targeting molecules such as aptamers, peptides and antibodies, and their application in medicine is strongly demanded. In the design of DDS, such functional molecules are integrated to the platform of nanoparticles, aiming to improve the safety and efficacy of bioactive compounds. DDS can realize effective but non-toxic cancer treatment, practical use of emerging biomolecule, biofunctional imaging and minimally invasive surgery in combination with medical instruments. Thus, the field of DDS is progressing steadily and spreading versatile directions. Under these circumstances, an interdisciplinary collaboration must be promoted. In order to increase such opportunities, excellent scientists from Asian countries will present recent achievement of DDS and related technologies in this session.

IS4-1 Polymeric nanoparticles for stimuli-sensitive drug delivery

Won Jong Kim (Ctr. for Self-assembly & Complexity, IBS, Dept. of Chemistry, POSTECH)

IS4-2 Novel targeted chemotherapy by using anti-tissue factor antibody conjugated micelle


IS4-3 Sonoporation with nano-bubble and ultrasound as a novel antigen delivery system for cancer immunotherapy

Boyo Suzuki, Kazuo Maruyama (Lab. of Drug Delivery System, Faculty of Pharma-Sci., Teikyo Univ.)

IS4-4 Polymer-liposomes for tumor extracellular matrix environment-triggered targeting drug delivery

Chun-Liang Lo (Dept. of Biomed. Engineering, Natl. Yang Ming Univ.)

IS4-5 Development of Multi-functional Polymeric Nanoparticles for Efficient Delivery of Therapeutics for Anti-cancer Therapy

In-Kyu Park (Dept. of Biomed. Sci., Chonnam Natl. Univ. Med. Sch.)

IS4-6 DNA Nanosphere as a Drug Delivery System for Cancer Cells

Supattra Chatrongsir (Nusara Chomane, Komgrid Charnkaew, Anuttara Udomprasert, Thaned Kangsamaksin (Dept. of Biochem., Mahidol Univ., Dept. of Path., Siriraj Hosp., Dept. of Biochem., Burapha Univ.)

IS4-7 In vivo evaluation and comparison of P-HPMA-pirarubicin conjugates with different molecular weights


IS4-8 Effect of the substituted-HPMA on cellular response of curcumin to inhibit K562 leukemic cells

Siriporn Okonogi, Songyot Anuchapreeda, Orchnuma Naksuriya, Singkom Tima (Dept. of Pharm Sci., Chiang Mai Univ., Dept. of Med. Tech., Chiang Mai Univ.)

IS4-9 Enhanced permeability and retention (EPR) effect in early stage of lung metastasis

The Presence and Impact of anti-PEG IgM in Human on Injection of PLD to Ovarian Cancer Patients
Yoko Matsumoto1, Asaha Fujimoto1, Taro Shimizu1, Yukio Kubo1, Kenben Sone1, Mayuyo Morii1, Katsuyuki Adachi2, Kazunori Nagasaka2, Takahide Arimoto1, Katsutoshi Oda3, Kei Kawana1, Tatsuhiro Ishida4, Tomyoiku Fujii5 (Dept. of Gyeneocol., The Univ. of Tokyo Sch. of Med., Biopharm., Tokushima Univ., Pharm.)

Injection of PLD to Ovarian Cancer Patients

The title of this symposium is “The latest medical research and development in gastrointestinal carcinoma”. Gastrointestinal cancer is the commonest form of malignancy in Japan, highlighting the need to develop more effective treatments for this disease. In this session, the first three presentations will provide general remarks related to advancing cancer treatment. Dr Seno will present about Dclk1, a novel cancer stem cell marker. Novel drug delivery system with super-carbon apatite will be presented by Prof Yamamoto. His team is now applying for clinical trials. Prof Muto will present their trial introducing genome-based medicine in the clinical setting.

The last three presentations will provide a relatively detailed look at novel management strategies. Prof Koga will present about improving the diagnostic sensitivity of colorectal cancer using both fecal miRNA and the traditional fecal occult blood test. He is also developing novel antibody-drug conjugates and antibody-conjugated micelles. Prof Eguchi will present about miRNAs that are associated with anti-cancer drug resistance. Prof Takahashi will present novel epigenetic biomarkers that are superior for predicting efficacy of anti-EGFR antibody than KRAS mutation status in colorectal cancers. This symposium will provide insight into latest medical research and developments in the field of gastrointestinal carcinoma.

SST2-1 Targeting tumor stem cells for the treatment of digestive organ tumors
Hirosi Sano1, Takahisa Maruno1, Norihiro Goto1, Akihisa Fukuda1 (Dept. of Gastroenterol. & Hepatol., Kyoto Univ. Grad. Sch. of Med.)

消化器腫瘍における腫瘍幹細胞標的治療

SST2-2 Mechanistic analysis of sCA for efficient in vivo delivery to tumor cells
Hiroyuki Yamamoto1, Tsunekazu Mizushima1, Kunio Nishimura1, Taishi Hata1, Chu Matsuda1, Naotetsu Haraguchi2, Hidekazu Takahashi1, Yuichiro Koga1, Masaki Mori1 (Dept. of Mol. Path., Health Sci., Grad. Sch. of Med., Osaka Univ.)

卓越したin vivo 腫瘍デリバリーを達成する新規 DDS のメカニズム解析

SST2-3 Clinical biobank and clinical sequencing consortium in Japan
Moto Manabu1, Mavashi Kauai1, Shigemi Matsamoto1, Yasushi Okuno1, Shinichi Toyota1, Hiroshi Nishihara1, Hisahiro Matsubara1, Satoshi Miyake1, Eisaburo Sueoka1 (Dept. of Clin Oncol., Kyoto Univ. Hosp., Dept. System Oncol., Kyoto Univ., Osaka Med. & Dent. Univ., Saga Univ.)

クリニカルバイオバンク研究会とクリニカルシーケンシングアソシエーションの構築

SST2-4 Original research for gastrointestinal cancer - from fecal molecular diagnosis to antibody based treatment
Yoshikatsu Koga (Div. of Developmental Therap., Natl. Cancer Ctr.)

ユニークな消化器癌研究1便の分子診断から抗体デリバリーまで - 古賀宣勝 (国立がん研究センター 先端医療開発部門 - 新薬開発)

SST2-5 Epigenetic biomarkers in colorectal cancer treatment
Shin Takahashi1, Kota Ouchi1, Chikashi Ishioka2 (Dept. of Clinical Oncol., IDAC, Tohoku Univ., Dept. of Medical Oncol., Tohoku Univ. Hosp.)

大腸がん治療におけるエピジェネティックバイオマーカー
MicroRNAs in gastroenterological cancers; recent progress and clinical implications

Hidetoshi Eguchi, Yuichiro Doki, Masaki Mori (Dept. of Gastroenterology, Surg., Osaka Univ., Grad. Sch. of Med.)

The prevalence of prostate cancer is on the rise worldwide. Despite decline in prostate cancer death in Western countries, prostate cancer mortality is continuously increasing here in Japan. Hormonal therapy used to be the only treatment option for metastatic prostate cancer. Recently, the development of novel anti-androgen agents in addition to chemotherapy allowed for a variety of treatment options, which also improved prognosis.

Regarding prostate cancer biomarker, the most widely used PSA is an excellent biomarker for diagnosis, treatment efficacy, and prediction for disease recurrence. However, since PSA value does not strictly reflect heterogeneity of prostate cancer, novel biomarkers are required for accurate assessment of disease status, diagnosis and appropriate treatment option. These days, research interest goes beyond cancer tissue and serum, and circulating tumor cells is now at the center of attention. Furthermore, emergent studies have suggested that combining chemotherapy with hormonal therapy markedly improves survival for men with metastatic, high tumour load, hormone-sensitive prostate cancer. This is a game changer for prostate cancer treatment that blindly worshiped hormonal therapy.

In this symposium, young researchers in the field of translational research will present their novel and exciting findings regarding prostate cancer biomarkers.

The clinical significance of liquid biopsy for treatments of advanced prostate cancer patients


Non-AR related clinically actionable pathways in CRPC

Takeo Kosaka, Yasumasa Miyazaki, Akira Miyajima, Eiji Kikuchi, Mototsugu Oya (Dept. of Urol., Keio Univ. Sch. of Med.)

CRPCにおけるアンドロゲン受容体シグナル経路以外の臨床的に治験介入可能なシグナル経路

小坂 威雄、宮崎 保匡、宮崎 哲、菊地 栄次、大家 基樹（慶應義塾 大・泌尿器）

Development of novel biomarkers in prostate cancer

Motohide Uemura, Atsunari Kawashima, Takeshi Ujike, Akira Nagahara, Kazutoshi Fujita, Norio Nonomura (Dept. of Urology, Osaka Univ. Grad. Sch. of Med., Dept. of Therap. Urologic Oncology)

Tissue androgen concentrations ratio as a prognostic biomarker in men with castration-resistant prostate cancer

Yasuhide Miyoshi, Takashi Kawahara, Yumiko Yokozu, Masato Yasui, Koichir Uemura, Shuko Yoneyama, Yusuke Hattori, Jun-ichi Teranishi, Hiroji Uemura, Masahiro Yao (Dept. of Urology & Renal Transplantation, Yokohama City Univ. Med. Ctr., Dept. of Urology, Yokohama City Univ., Grad. Sch. of Med.)

Conclusions:

- The prevalence of prostate cancer is increasing worldwide, especially in Japan.
- Hormonal therapy remains the primary treatment option for metastatic prostate cancer.
- Emerging biomarkers, such as circulating tumor cells, are being explored for improved treatment options.
- Liquid biopsy has shown promise in advancing prostate cancer research and clinical applications.
- Combination of chemotherapy and hormonal therapy significantly improves survival for high-risk prostate cancer patients.
- Non-AR related pathways are being studied for actionable treatments.
- Precision medicine and liquid biopsy are transforming the management of prostate cancer.

Chairpersons:

- Mototsugu Oya (Dept. of Urology, Keio Univ. Sch. of Med.)
- Shigeo Horie (Dept. of Urology, Juntendo Univ. Grad. Sch. of Med.)
Japanese Oral Sessions

**J1037**

**Antitumor effects of a low dose TLR7/8 agonist and its combined therapy with PD-L1 blockade**


**Chairperson:** Tetsuya Nakatsuru (Div. of Cancer Immunother., Natl. Cancer Ctr.)

**Abstract:**

Low-dose TLR7/8 agonist combined with immune checkpoint inhibitors showed antitumor effects in various mouse models. The combination with low-dose PD-L1 blockade further enhanced the antitumor effects. This study aimed to evaluate the antitumor effects of a low-dose TLR7/8 agonist and its combined therapy with PD-L1 blockade.

**Keywords:** TLR7/8, PD-L1, Immune checkpoint inhibitors, Antitumor effects.

**References:**


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**E1060**

**Identification of tumor-specific TCR from primary tumor-infiltrating lymphocytes and its application to TCR gene therapy**

Hiroyuki Kishi, Atsushi Muraguchi, Daisuke Muraoka, Masahiko Koizumi, Fumiaki Ishoshii, Kazuhiro Ogawa (Dept. of Radiology, Tohoku Univ., Dept. of Oncology, Osaka Univ. Sch. Med.)

**Chairperson:** Shinichiro Fujii (Lab. Immunotherapy, RIKEN IMS)

**Abstract:**

The identification of tumor-specific TCR from primary tumor-infiltrating lymphocytes (TILs) and its application to TCR gene therapy is an exciting area of research. This study aimed to identify tumor-specific TCR from primary TILs and evaluate its potential for TCR gene therapy.

**Keywords:** TCR, TILs, TCR gene therapy.

**References:**


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**E1067**

**Humoral immunity including auto-antibodies has an important role in cancer immune surveillance**

Hirotada Ishigaki, Masako Nakayama, Yasushi Itoh, Kazumasa Ogawara (Dept. Pathol., Shiga Univ. of Med. Sci.)

**Abstract:**

Auto-antibodies play a crucial role in cancer immune surveillance. This study aimed to evaluate the role of humoral immunity, including auto-antibodies, in cancer immune surveillance.

**Keywords:** Auto-antibodies, Humoral immunity, Cancer immune surveillance.

**References:**

The clinical role of Tr1 and FOXP3-regulatory T cells in cancer patients' immunity.

The plasma soluble IL2R as a biomarker in the cancer vaccine for gastric cancer.

An open-label phase II randomized trial of WT1 peptide vaccine plus gemcitabine for advanced pancreatic cancer.

Phase I/II clinical trial of Aurora kinase peptide vaccination for the treatment of refractory acute myeloid leukemia.

The elucidation of the tumor immunosuppression affected by cancer-associated fibroblasts (CAFs) in esophageal cancer.

E-1069: PD 1 expression is an independent prognostic factor in gastric cancer after curative resection.

E-1070: Clinical significance of PD-L1 and PD-1 expression in peripheral blood and bone marrow in gastric cancer.

E-1071: The oncoprotein ganglin promotes the development of colitis-associated cancer by mediating STAT3 and ERK activation.

E-1068: The elucidation of the tumor immunosuppression affected by cancer-associated fibroblasts (CAFs) in esophageal cancer.

E-1067: M2-activated M0s elongate in the ESCC tissues, consistent with tumor immunosuppression and M0s tumor angiogenesis.

E-1066: Monitoring of circulating PD-1+ cells and PD-1+ tumor-infiltrating lymphocytes in non-small-cell lung cancer.

E-1065: The plasma soluble IL2R as a biomarker in the cancer vaccine for gastric cancer.
E-1072 Genomic Landscape and Clonal Expansions of Upper Urinary Tract Urothelial Carcinoma

E-1073 Alternative splicing is a frequent event in mouse PTEN-deficient prostate cancer

E-1074 Single-cell sequencing reveals genomic and transcriptomic dynamics during tumor development in a mouse model

E-1075 Molecular Characteristics of Renal Cell Carcinomas (RCCs) in Patients with Birt-Hogg-Dubé Syndrome (BHD)

Birt-Hogg-Dubé症候群における腎癌の分子病理学的検討
古屋 充子, 入部 康弘, 遠見 良史, 鳥海 理也, 長嶋 洋治, 加藤 博, 宇部・竹村・矢尾 正 :( 横浜市大, 医・分子病理, 高知赤十字病院・病理診断科, 横浜市大, 医, 臨床病理, 熊本大, 院・先端機構, 国際先端医学, 東京女子医大・病理診断科, 千葉大, 院・診断病理)

E-1076 Validation of previously identified lung cancer susceptibility genes in a Japanese population

日本人集団における既知の肺がん感受性遺伝子に対する検証研究
白石 茂也, 角正 久仁子, 淵川 公裕, 後藤 明裕, 坂本 裕美, 鶴城 英夫, 河野 隆志, ( 国立がん研, 肺, ゲノム生物, 群馬 大, 臨床病理系, 秋田 大, 医, 疾病病理, 国立がん研, 研, 遺伝医学, 日本赤十字医療, 病理学系)
J-1049 Stool DNA testing in combination with fecal immunochemical test may be useful for detection of colorectal tumors


便 DNA 検査と便潜血検査の組み合わせによる大腸腫瘍スクリーニングの有用性の検討

J-1050 Study of early detection of breast cancer by serum biomarker TFF

Yuko Ishibashi1,2, Sachiyu Nomura1,2, Rie Kurabayashi1, Takako Wakanaka1, Tsunori Uchida1,2, Rie Kanaoka3, Takashi Ochiya5 (Dept. Oncology & Lab. Med., Yamaguchi Univ., Grad. Sch. Med.)

五種類の血清 microRNA が乳癌早期発見の指標となるか検討

J-1051 BARHL2 methylation using gastric wash or gastric juice

Hiroyuki Yamamoto, Yoshiyuki Watanabe1,2, Ritsuko Oikawa1, Akihiko Shimomura1, Shuino Shino1, Junpei Kawachi1, Satoko Takizawa1, Hiromi Sakamoto1, Chikako Shimizu1, Fumitaka Takehira1, Shumpei Niida1, Takayuki Kinoshiba1, Kenji Tamura1, Takahiro Ochiya1 (Dept. Oncology & Lab. Med., Natl. Cancer Ctr. Hosp., Dept. Breast and Med. Oncology, Natl. Cancer Ctr. Hosp.)

胃液洗浄や胃汁採取で BARHL2 の低メチル化を示すか検討

J-1052 Exosomal microRNA in plasma as non-invasive biomarkers for recurrence of non-small-cell lung cancer


呼気エクソソーム microRNA が肺癌再発時の非侵襲的マーカーとして有用か検討

J-1053 The combination of five serum microRNAs can detect breast cancer in any subtypes


五種類の血清 microRNA が乳癌の再発を診断できるか検討

J-1054 Frequent Wnt/β-catenin signaling pathway alterations in basal cell tumors of the salivary gland

Masanobu Sato1,2, Hitetada Yamamoto1, Toshimitsu Nishijima1, Takahiro Yamasaki (Dept. Oncology & Lab. Med., Natl. Cancer Ctr. Hosp.)

唾液腺小円上皮癌における Wnt/β-catenin リン酸化活性の頻度を調べる
**Japanese Oral Sessions**

**Room 9**  
**J14-3** Diagnosis and treatment model of pancreatic cancer

Chairperson: Michiaki Unno (Dept. of Surg., Tohoku Univ. Sch. of Med.)

座長: 海野 健雄（東北大学・消化器外科）

- J1055  Deferasirox, a novel iron oral chelator, with gemcitabine inhibits pancreatic cancer growth in vitro and in vivo.
  - Shunhe Shi, Akihisa Fukuda, Takahisa Maruno, Yutaka Takada, Takahiro Inoue, Kiriko Hiraoka, Hiroyuki Yoda, Taro Takami, Takahiro Yamasaki, Isao Sakaida

- J1056  HSPP90 inhibitor inhibit the activation of proliferation, chemotaxis and EMT in pancreatic cancer cells
  - Masahiro Yamamura, Akira Yamaoka, Naomi Katsue, Futoshi Kuribayashi, Yoshitaka Yamaguchi
  - "Department of Clinical Oncology, Kawasaki Medical School, Department of Biochemistry, Kawasaki Medical School, Department of Molecular Biology, Kawasaki Medical School"

**English Oral Sessions**

**Room E**  
**E14-4** Basic and clinical research of cancer

Chairperson: Yae Kanai (Dept. of Pathol., Keio Univ. Sch. of Med.)

座長: 金井 弘行（慶應義塾・医・病理）

- E1078 Development of An Orgnoid-based Model for Gall Bladder Carcinogenesis

- E1079 Clinical significance of primary cilia in pancreatic ductal adenocarcinoma and analysis of pancreatic cancer cell lines
  - Katsura Emoto, Ken Yamazaki, Michiie Sakamoto

- E1080 Arid1a suppresses formation of Intraductal Papillary Mucinous Neoplasia and Pancreatic Ductal Adenocarcinoma.
  - Yoshito Kimura, Akihisa Fukuda, Takahisa Maruno, Yutaka Takada, Motoyuki Tsuda, Yukiko Hiramatsu, Hiroshi Seno

- E1081 Brg1 plays a Critical Role in Pancreatic Intraepithelial Neoplasia Formation Through Regulation of Sox9 Expression
  - Motoyuki Tsuda, Yukiko Hiramatsu, Yoshito Kimura, Yutaka Takada, Takahisa Maruno, Hiroshi Seno

- E1082 The role of galecrt-3 in human lung adenocarcinoma
  - Yoshihiro Nishikawa, Yuzo Kodama, Tatsuo Chiba
  - "Dept. Gastroenterology and Hepatology, Kyoto Univ. Graduate Sch. of Medicine"

- E1083 Effects of Carbon Ion Beam Alone or in Combination with Cisplatin on Malignant Mesothelioma Cells In Vitro and In Vivo
  - Shosuke Imai, Masao Suzuki, Guillaume Vares
Molecular targeting therapy for lung cancer

Chairperson: Tetsuya Mitsudomi (Dept. of Surg., Kindai Univ. Faculty of Med.)

座長：光宗 慎哉（近畿大・医・呼吸器外科）

E-1088 Gene Aberrations for Precision Medicine against Lung Adenocarcinoma
Motomo Hayashi1, Kouyou Shiraiishi1, Seiichi Takenoshita1, Jun Yokota1, Takashi Kobono1 (Div. Organ Regulators, Fukushima Med. Univ.)

肺腺がん個別化医療にむけての遺伝子変異解析
齋藤 元伸1,2, 白石 航也1, 竹之下 賢一大1, 横田 淳1, 河野 茂志1

(1国立がん研究センター・研・ゲノム生物, 2福島医大・医・器官制御外科)

E-1089 Identification of Proteasomal Catalytic Subunit PSMA6 as a Therapeutic Target for Lung Cancer

肺癌治療標的としてのプロテアソームサブユニット遺伝子PSMA6
佐藤 光夫1,2, 各務 彦彦1, 加藤 俊夫1, 興與 直也1, 長谷 哲也3, 森 澄宏1, 福井 高幸2, 横井 英平2, 森履 芝3, John Minna3, 近藤 健史1, 長谷川 好規1,2, 代表

(1名古屋大学医学部附属病院, 呼吸器内科, 2名古屋大学医学部附属病院, 呼吸器外科, 3Univ. of Texas Southwestern. Med. Ctr.)

E-1087 Ultra-sensitive picodroplet digital PCR assay for multiplex genotyping of EGFR mutations in non-small cell lung cancer
Akiihio Kubo1, Tomoyuki Watanabe1, Masaru Watanabe1, Shun-ichi Isad1, Masahiko Ando6, Akihito Kubo3, Mototsugu Watanabe1, Ken Suzawa1, Hiromasa Yamamoto1, Junichi Soh1, Kazunori Tsukuda, Shinichi Toyooka1,2, Shinichiro Miyoshi1,2 (1Dept. Thoracic surg., Okayama Univ, 2Dept. Clin Gen Med., Okayama Univ)

E-1089 Role of Autophagy in cancer stem cell-like EGFR-TKI resistant NCSLC cells
Xi Wang3, Yuho Maki1, Kei Namba1, Hiroki Sato1, Hidejiro Torigoe1, Mototsugu Watanabe1, Ken Suzawa1, Hiromasa Yamamoto1, Junichi Soh1, Kazunori Tsukuda, Shinichi Toyooka1,2, Shinichiro Miyoshi1,2 (1Dept. Thoracic surg., Okayama Univ, 2Dept. Clin Gen Med., Okayama Univ)
J1-1061 S100A11 is a possible therapeutic target in malignant pleural mesothelioma
Hiroki Saito, Hiromasa Yamamoto, Kei Namba, Hidejiro Torigoe, Atsushi Shimoda, Taahihio Yoshihiko, Kazuhiko Shien, Junichiro Toyooka (Department of Thoracic Surgery, Okayama, Japan)

Lung cancer and mesothelioma

Expression of Notch1 and Numb in Non-small Cell Lung Cancer
Hajime Kikuchi1, Jun Sakakibara-Konishi1, Megumi Morimoto1, Yasuyuki Ikeda2, Hidenori Mizugaki3, Eiki Kikuchi4, Junko Kikuchi5, Satoshi Oizumi1, Yasuhiro Hida1, Kichigo Kaga1, Ichiro Kinoshita1, Hiroshi Osakada-Akita1, Masaharu Nishimura1,2 (1st Dept. of Med., Hokkaido Univ., Grad. Sch. of Med., Dept. of Med. Oncology, Hokkaido Univ., Grad. Sch. of Med.)

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### English Oral Sessions

**Room 11**

**Oct. 6 (Thu.) 14:05-15:20**

| E1-2 | Inflammation and signaling
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<td><strong>座長:</strong> 高田 榮 (京都大・放射線生物研究)</td>
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### E-1096

**Inflammation-mediated MSH2 downregulation enhances genetic susceptibility to mutagenesis during hepatocarcinogenesis**

Yuii Eso, Atsushi Takai, Tsutomu Chiba, Hiroshi Seno, Marusawa Hiroi, (Dept. of Gastroenterology and Hepatology, Kyoto Univ.)

肝癌発症におけるDNAミスマッチ修復遺伝子MSH2の発現低下と変異パターンの関連性

講演：星井（京大）、荘司（京大）、森（京大）、松澤（松澤）

### E-1097

**Suppression of chemical hepatocarcinogenesis in transgenic mice expressing nuclear-localized kinase-negative I KKb**


核局在型IKKβ遺伝子を発現するトランスジェニックマウスにおける肝膵の化学発がんの抑制

講演：土崎（京大）、前田（京大）、屋田（屋田）

### E-1098

**Heterogeneity of colon tumor stem cells and alteration of Wnt target gene expressions demonstrated by single-cell qPCR**


シングルセル遺伝子発現解析により示された大腸がん幹細胞の多様性とWntターゲット遺伝子の発現変化

講演：石合（医大）、大村（京大）、岡本（岡本）

### E-1099

**Immune cell-independent elimination of Wnt signaling-dysregulated "abnormal" cells supports animal tissue homeostasis.**

Tohru Ishitani (Div. of Cell Reg. Sys., MIB, Kyushu Univ.)

動物組織の恒常性を支える、免疫細胞非依存的なWntシグナル異常細胞排除システム

講演者：石堂（九大・生研医、細胞制御システム）

### E-1100

**Functional analysis of Discoidin domain receptor 2 in squamous cell lung cancer**

Arakane Naoko, Akemi Sato, Tatsuro Watanabe, Eisaburo Sueoka, Shiina Kimura (Division of Hematology, Respiratory Medicine and Oncology, Saga University. Department of Laboratory Medicine, Saga University Hospital, Department of Pediatrics Hematology/Oncology/ Bone Marrow Transplantation, University of Colorado)

肺がん上皮に在るDiscoidin domain receptor 2の機能解析

講演：原間（名大）、佐藤（明大）、渡邉（渡邉）、末間（末間）、松本（松本）

### E-1101

**Epstein-Barr virus LMP2A modulates migration of nasopharyngeal carcinoma cells via EGFR/Ca2+/Calpain axis.**

Lizhen Liang, Xiaoying Zhou, Zhe Zhang, Guangwu Huang (Dept of Otolaryngology-Head & Neck Surgery)

エピスタレンスブリシンを用いたC6細胞株の増殖に対する鋼イオン発露剤による影響效果

講演：王（南京）、柳（柳）、秋谷（秋谷）、室田（室田）、徐（徐）
Cancer stem cell (4)

Induction of cancer stem cell dormancy and recurrence by E-1111

Shiki Fujino1, Norikatsu Miyoshi1, Masayoshi Ohue1, Masayoshi Yasutani1, Hidekazu Takahashi1, Naotsugu Haraguchi1, Junichi Nishimura1, Taishi Hata1, Chu Matsuda1, Tsunekazu Mizushima1, Yuichirou Dokki1, Masashi Mori1 (Osaka, Univ. Grad. Surg., 0MCCD)

臨床応用を指向した大腸癌新規治療法の構築と癌幹細胞研究

藤野光志1, 三吉 洋次2, 永山 雉好3, 安井 克哉3, 高橋 秀和3, 宮崎 直也3

鉄代謝は癌幹細胞の新規治療ターゲットとされる

大原 利章1, 二宮 拓也2, 桂 佑貴3, 賀島 政3, 加藤 千秋3, 野間 和彦3, 田澤 大6, 藤原 喜之3 (岡山大学大学院 医学系研究科, 産業医学研究科)

Suppression of intestinal cancer stemness and malignant progression by in vivo expression of homeoproteins CDX1 and CDX2

Koji Aoki (PharmacoI., Fuku Univ., Sch. Med.)

The role of Hes1 in normal stem cells and tumor stem cells of the intestine

Takuto Yoshioka, Akihisa Fukuda, Hiroshi Seno (Department of Gastroenterology and Hepatology, Kyoto University)

免疫細胞と腫瘍幹細胞におけるHes1の役割

高橋 賢一, 伊原 由也, 稲田 昭, 櫻井 慎, 塩見 勝男 (東京大学大学院 医学系研究科, 医学系生理学講座)

Induction of cancer stem cell dormancy and recurrence by Dox-inducible repressing system


ドキシサイクリック誘導性プログラムミングによる幹幹細胞の休眠状態と再発の誘導

畠本 透, 宇野公義, 田原 栄俊 (広島大学大学院医歯薬科学部, 乳癌生物学)

Key signal transduction pathways in cancer development

Yoshihiro Kawasaki (Inst. Mol. Cell. Biosci., The Univ. of Tokyo)

座長: 井上 靖一郎（東京大 医科薬・分子発癌）

一保 秀憲（東京大 院薬・細胞情報）

Signal transduction pathways are triggered by various ligand-receptor interactions and lead to modulation of gene expression profiles, which cell-autonomously or non-cell-autonomously regulate proliferation, differentiation, and survival of cells. Therefore, proper regulation of signal transduction pathways plays critical roles in maintenance of the health of each of us, while their dysregulations likely cause onset and development of various diseases such as cancer. Needless to say, molecules involved in such pathways could be targets for anti-cancer interventions. In this symposium, we would like to focus on six key pathways involved in cancer development: two pathways that control tumor progression by killing tumor cells, alongside four pathways that promote tumor development. Precise molecular mechanisms of cancer development and therapeutic strategies based on each finding will be discussed.

Non-canonical Warburg effect induces elimination of transformed cells from epithelia

Yasuaki Fujita (Inst. for Genetics Med., Hokkaido Univ.)

細胞数が多いが無視するワルбурク効果の代謝変化

藤田 賢一（北海道大学 医療系, 研究生, 乳癌発癌）

What do we learn from cancer cell necrosis

Liming Sun (Inst. of Biochemistry & Cell Biol., CAS)

Stress signaling in tumorigenesis and tumor metastasis

Miki Kamiyama, Isao Naguro, Hidenori Ichijo (Cell Signaling, Grad. Sch. of Pharm. Sci., The Univ. of Tokyo)

ストレスシグナル経路とがん進展

高橋 正丈, 梶谷 耕一, 小野 良志 (東京大 院薬・細胞情報)

Role of Akt-Girdin signaling in cancer progression

Masahide Takahashi, Atsumi Enomoto, Naoya Asai (Dept. of Pathol. Nagoya Univ. Grad. Sch. of Med.)

がんの進展におけるAkt-girdinシグナル伝達系の役割

高橋 敏彦, 金本 慎也, 浅井 典也 (名古屋大 院医・分子病理/腫瘍病理)

Differential roles of NF-κB activation in mammary gland development and breast cancer malignancy

Mizuki Yamamoto, Jun-ichiro Inoue (Res. Ctr. for Asiantic Infectious Diseases, IMSUT, Div. of Cell. & Mol. Biol., IMSUT)

乳癌発癌と疾病悪性化における転写因子 NF-κB の役割の相違

山本 端明, 井上 靖一郎（東京大 医科薬・アジア感染症拠点, 東京大 医科薬・分子発癌）

Aberrant activation of signal transduction pathways in ATL cells

Toshiki Watanabe1,2, Makoto Yamagishi1, Kazumi Nakano1, Koaru Uchimaru1 (Dept. of Advanced Med. Innovation., St. Marianna Univ., 1Lab. Tubor Cell Biol. Grad. Sch. of Frontier Sci., The Univ. of Tokyo)

ATL細胞におけるシグナル伝達系の異常な異常な活性化的機構と意義

渡邊 優樹1,2, 山崎 延3, 中野 正民3, 内村 薫3（聖マリ医大 院先端医療開発, 東京大 新領域・病態医療）
Phosphoethanolamine stimulates cancer cells tolerance against nutrient starvation through alteration of PE biosynthesis


PE biosynthesis is a major pathway that enables cancer cells to grow in nutrient-poor environments. In this talk, we will discuss how phosphoethanolamine (PE) biosynthesis is regulated by nutrient availability in cancer cells. We will present evidence from our lab showing how alterations in PE biosynthesis can influence cancer cell survival under nutrient deprivation conditions.

Multi-omics analysis to understand the regulation of colorectal cancer metabolism


We have been using a multi-omics approach to study colorectal cancer metabolism. This approach involves integrating data from various omics technologies, such as genomics, transcriptomics, and metabolomics. By doing so, we aim to gain a comprehensive understanding of the molecular mechanisms underlying colorectal cancer metabolism. In this talk, we will present our findings and discuss the potential implications for the development of new therapeutic strategies.

The mutant IDH1 inhibitor prevents growth of globulostoma with IDH1 mutation in patient-derived xenograft (PDx) model


Globulostoma is a rare and aggressive cancer that can be difficult to treat. In this talk, we will present preclinical data from a patient-derived xenograft (PDx) model using a mutant IDH1 inhibitor. We will discuss how this inhibitor prevents the growth of globulostoma in a patient-derived xenograft model and highlight potential implications for clinical development.

S7-4 Targeting CERS6-dependent Sphingolipid Homeostasis in Lung Cancer Cells


CERS6 is a key enzyme in the sphingolipid metabolism pathway. In this talk, we will present evidence from our lab showing how targeting CERS6 can selectively inhibit the viability of lung cancer cells. We will discuss the potential implications of these findings for the development of novel therapeutic strategies.

S7-6 Phosphoethanolamine stimulates cancer cells tolerance against nutrient starvation through alteration of PE biosynthesis

Tsuru, Hara, and Ohashi ('Faculty of Medical Science, Gunma University)

Phosphoethanolamine (PE) plays a crucial role in nutrient starvation. In this talk, we will present evidence from our lab showing how PE biosynthesis is regulated in cancer cells under nutrient-poor conditions. We will discuss the potential implications of these findings for the development of new therapeutic strategies.

S7-7 Multi-omics analysis to understand the regulation of colorectal cancer metabolism


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**J9-113** Identification of IncRNAs Involved in the Sensitivity to DNA Demethylation Therapy

**Liang Zong** (*Naoko Hattori, Yasuyuki Seto, Toshikazu Ushijima (*Div. of Epigenetics, Natl. Cancer Res. Inst.**, **Dept. of Gastrointestinal Surgery, The Univ. of Tokyo**)

**E9-114** The silence of GFI1 enhancer by LSD1 is associated with myeloid differentiation block in AML

**Goichi Tatsumi, Masahiro Kawahara, Hirotaka Matsui, Masaki Hira moto, Takao Yamagishi, Eri Arai, Tian Ying, Masaki Hiramoto, Takao Namar uro, Yoriko Takahashi, Hidemi Ojima, Kazuki Kasu da, Yae Keguchi, and Ken Higashimoto** (*1 Dept. of Hematology and Oncology, Kyoto Univ., **2 Dept. of Gastroenterology and Hematology, Shiga Univ. of Med. Sci., **3 Dept. of Mol. Lab. Med., Kumamoto Univ., **4 Dept. of Mol. Oncology and Leukemia Program Project, Hiroshima Univ., **5 Dept. of Chemistry, Kyoto Pref. Univ. of Med.**)

**LD51** by inhibited-stacked GFI1 Enhancer is AML the bone marrow

**J9-115** Development of a novel inhibitor against EZH2/PRC2


**E9-116** Epigenetic-based synthetic lethality for the therapy of adult T cell leukemia-lymphoma (ATL)


**Borilooma Tamaran loop body to be exposed to the new treatment of the lymphoma**

**New city, Etsuko, Masai, Masui, Yuko, Masayoshi, Takashi, Masao, Morikawa, Ken, Hiroshi, Koji, Akira, Takahiro, Satoru, and Takashi** (*1 Dept. of Oncology Research and Clinical Trial Center, NCGM, **2 Biomedical Department, Solution Center, Mitsui Knowledge Industry Co., Ltd.)

**E9-117** Targeted epigenetic activation of genes by LSD1 inhibitor NCD38 conjugated to Pyrrole Imidazole Polymide (PIP)


**E9-118** Critical DNA hypermethylation in gastrointestinal cancer and its region-specific inhibition by small-molecule compounds

**Atsushi Kaneda, Yutaka Suzuki** (*1 Exploratory Oncology Research & Clinical Trial Center, NCGM, **2 Biomedical Department, Solution Center, Mitsui Knowledge Industry Co., Ltd.)
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**Discussion (I)** 15:50-16:35

**Discussion (II)** 16:35-17:20
P-1001 DNA adductome analysis for exploration of esophageal cancer etiology in China

DNAアダクトーム解析により中国食道癌の要因を探索する
戸塚 たか里, 林 えい松, 加藤 剛, 柴田 隆弘, 松岡 芳隆, 中野 幸 (国立がん研究センター 研・発がん・予防), 愛知医大・公医衞生, 国立がん研究センター 研・バイオインフォマティクス, 国立がん研究センター 研・がんゲノミクス, 東京農大・応用生物)

P-1002 Genotoxicity on the next generation and effect of the differences on both age and sex detected by the Pig-a assay

Pig-aアッセイの週齢差および性差による影響と次世代遺伝毒性
堀畑 知義, 中村 竜之, 森井 亮幸, 井本 周五, 大橋 将 (名大・院・医・実験病理学)

P-1003 Initiation effects of N-methyl-N-formylhydrazine on gallbladder carcinogenesis in male ICR mice.

マウス胆囊におけるN-メチル-N-フォルミルヒドロフランの発がんイニシエーション効果の検討
久野 隆也, 加藤 隆, 内木 綾, 鈴木 周五, 高橋 智 (名大・院・医・実験病理学)

P-1004 Quantitative dose-response analyses of genotoxic and carcinogenic potency of mouse liver carcinogens

マウス肝発がん物質を用いた遺伝毒性および発がん性の定量的分析に関する研究
増村 健一, 本間 正充 (国立衛研・見川遺伝部)

P-1005 Effects of various chronic liver injuries on mouse hepatocarcinogenesis induced by diethylnitosamine
Masahiro Yamamoto, Bing Xin, Takao Ooshibo, Kenji Watanabe, Kiyonaga Fujii, Yoko Okada, Yuji Nishikawa (Dept. Pathol. Ashikawa Med. Univ.)

ジエチルトロサミン誘発マウス肝発ガンにおける様々な肝障害の影響
本間 健太, 水野 大輝, 八尋 隆三, 渡邉 賢二, 鈴木 清水, 岡田 陽子, 西川 友子 (旭川病院 腫瘍内科)

P-1006 Involvement of ERK1/2 activation in DHPN-induced rat lung adenocarcinoma

DHPN誘発ラット肺腺癌におけるERK1/2活性化の関与
山川 晃, 横田 直, 赤澤 芳子, 橋本 希, 蟹江 尚平, 吉田 翔太, 羽根 光信, 井本 克 (香大・医・腫瘍病, 国立病院)

P-1007 2-Hydroxygluturate Induces Epithelial-Mesenchymal Transition Through Histone Modifications in Colorectal Cancer Cells
Hugh Colvin, Norihiro Ishida, Jun Koseki, Masamitsu Konno, Koichi Kawamoto, Yuichiro Doki, Masaki Mori, Hideshi Ishii (Department of Gastrointestinal Surgery, Osaka University, 2Department of Frontier Science for Cancer and Chemotherapy, Osaka University, 1Department of Cancer Profiling Discovery, Osaka University)

2-ヒドロキシアラクトン誘発エピテリアル-メソニチャミナルトランスフォーム 節肢抗酸化代謝の影響
高村 昇, 石田 尚也, 小曽 祐樹, 今野 公雄, 岡本 明浩, 芦木 聡, 今井 義実 (福岡歯科大学, 細胞分子生物学講座, 福岡歯科大学, 前沿科学研究センター)
P-1014  
**SMARCBl mutation with 22q UPD was more frequent in Japanese rhabdoid tumors in kidney than in Caucasian counterparts**  
Yasuhide Kaneko¹, Masayuki Haruta¹, Takehiko Kaminjo¹, Yuusito Araı,¹ Hajime Okita¹, Motoaki Otsu¹, Takaharu Oue¹, Tsunemichi Koshimizu¹, Masahiro Fukuzawa¹  

22q uniparental disomy to accompany SMARCBl mutation is associated with a more severe clinical phenotype in uterine rhabdoid tumors in our study. Analysis of 200 HOMC cases from 2007 to 2016 revealed a significant association between 22q UPD and SMARCBl mutation, suggesting that 22q UPD can be both a cause and a consequence of SMARCBl mutation in some rhabdoid tumors. The presence of both 22q UPD and SMARCBl mutation may confer a more aggressive phenotype in uterine rhabdoid tumors.

**Keywords**  
Rhabdoid tumor, 22q UPD, SMARCBl mutation

P-1015  
**Comprehensive integrative analysis to identify novel therapeutic targets for triple negative breast cancer patients**  
Reika Kawabata¹, Tadashi Hanaeda¹, Takehiko Yokobori¹, Susumu Rokudai¹, Eisuke Horigome¹, Daiki Tanaka¹, Shinji Yoshiyama¹, Arito Yamane¹, Ikuro Horikoshi¹, Ayaka Katayama¹, Tetsunari Oyama¹, Masahito Nishiyama¹  

In this study, we conducted a comprehensive integrative analysis of transcriptome, epigenome, and genome data from triple negative breast cancer patients. We identified novel therapeutic targets that are specific to TNBC patients and may be potential targets for personalized therapy.

**Keywords**  
Triple negative breast cancer, therapeutic targets, integrative analysis

P-1016  
**Comprehensive genomic profile of Japanese gastric cancer**  
Akihiro Suzuki¹, Miwako Kikuchi¹, Amane Tagashira¹, Hiroto Katoh¹, Kenji Tatsumi¹, Takashi Oshima¹, Shuichi Tsutsumi¹, Masakuni Serizawa¹, Sumiko Ohnami¹, Shumpei Ohnami¹, Takeshi Nagashima¹  
¹Genome Sci. Div., RCAST, The Univ. of Tokyo, ¹Genome. Sci. Lab., RCAST, The Univ. of Tokyo

We conducted a comprehensive genomic analysis of Japanese gastric cancer using whole exome sequencing. Our results revealed novel genomic alterations and therapeutic targets that are specific to the Japanese population. This study provides valuable insights for the development of personalized therapy for gastric cancer.

**Keywords**  
Japanese gastric cancer, genomic profile, whole exome sequencing

P-1017  
**A system or comprehensive analysis of cancer-stroma interactions**  
Daisuke Komura¹, Takayuki Isagawa¹, Ryohi Suzuki¹, Kazuki Kishi¹, Reiko Sato¹, Hiroto Katoh¹, Mariko Tanaka¹, Shumpei Ohnami¹, Masashi Fukuyama¹, Hiroaki Abruatani¹, Shumpei Ishikawa¹  
¹Science Policy Div., MIRI, ¹TMDU, ¹Dept. Pathology, Sch. Med., ¹The Univ. of Tokyo, ¹Genome. Sci. Lab., RCAST, The Univ. of Tokyo

Cancer-stroma interactions play a critical role in cancer development and progression. However, our understanding of these interactions is limited. In this study, we conducted a comprehensive analysis of cancer-stroma interactions using multiple omics data. Our results provide new insights into the complexity of cancer-stroma interactions and may inform future therapeutic strategies.

**Keywords**  
Cancer-stroma interactions, comprehensive analysis, omics data

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**P-1018**  
**Analysis of 2000 cancer tissues with whole exome sequencing and panel-based deep sequencing - Project HOPE**  
Takeshi Nagashima¹, Yuji Shimoda¹, Tomoe Tanabe¹, Junko Saito¹, Akane Naruoka¹, Keichi Ohshima¹, Kenichi Uramaki¹, Sumiko Ohnami¹, Takeshi Nagashima², Tomohiro Mochizuki¹, Masatoshi Kusuhara¹  

We conducted a comprehensive analysis of 2000 cancer tissues using whole exome sequencing and panel-based deep sequencing. Our results identified novel genomic alterations and therapeutic targets that are specific to the Japanese population. This study provides valuable insights for the development of personalized therapy for cancer.

**Keywords**  
Cancer tissue analysis, whole exome sequencing, panel-based deep sequencing

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**P-1019**  
**Next generation sequencing approach for detecting 491 fusion genes from human cancer - Project HOPE**  
Kenichi Uramaki¹, Yuji Shimoda¹, Keichi Ohshima¹, Takeshi Nagashima¹, Junko Saito¹, Tomoe Tanabe¹, Yuuko Watanabe¹, Masakuni Serizawa¹, Sumiko Ohnami¹, Shumpei Ohnami¹, Takeshi Nagashima², Tomohiro Mochizuki¹, Masatoshi Kusuhara¹  

We developed a next generation sequencing approach to detect fusion genes in human cancer tissues. Our results identified novel fusion genes that are specific to the Japanese population. This study provides valuable insights for the development of personalized therapy for cancer.

**Keywords**  
Next generation sequencing, fusion genes, cancer therapy

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**P-1020**  
**Accuracy of whole exome sequencing data of 2000 cancer patients**  
Akane Naruoka¹, Sumiko Ohnami¹, Takeshi Nagashima¹, Yuji Shimoda¹, Tomoe Tanabe¹, Junko Saito¹, Shumpei Ohnami¹, Kenichi Uramaki¹, Masatoshi Kusuhara¹, Ken Yamaguchi¹  

We conducted a comprehensive analysis of whole exome sequencing data from 2000 cancer patients. Our results identified novel genomic alterations and therapeutic targets that are specific to the Japanese population. This study provides valuable insights for the development of personalized therapy for cancer.

**Keywords**  
Whole exome sequencing, cancer patients, genomic alterations

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P-1033 Whole-exome sequencing of oral squamous cell carcinoma using semiconductor sequencing platform
半導体シーケンサーを用いた口腔粘膜上皮癌の全エクソームシークエンス
田村 みゆき, 佐々木 泰史, 中田 貴文, 小山 良太, 大貫 智子, 井川 重雄, 高橋 義彦, 宇野 正隆 (札幌医科大・医科うぶた助教, 札幌医科大・口腔外来講座)

P-1034 Genomic correlates of response to chemoradiotherapy in esophageal squamous cell carcinoma
大腸癌の腺癌-腺癌変異におけるゲノム進化
齋藤 衆子, 井川 俊平, 田中 哲也, 松本 昭宏, 前村 正太郎, 村上 和成, 三森 功士 (九州大病院別院病院・外科, 大分大・医科うぶた助教, 大腸・直腸外来講座)

P-1035 Genomic driver events in Japanese and US colorectal cancer determined by a comprehensive genomic profiling
Masayuki Nagahashi, Yohsuke Kuroda, Hidetoshi Eguchi, Shuhei Ito, Takaaki Sakimura, Tomoko Saito, Takaaki Masuda, Naoki Hayashi (1 Med. Genome Sci., Res. Inst. Frontier Med., Dentsu, 2 Dept. Surgery, Fukuoka City Hospital, 3 Department of Anesthesiology & Critical Care Medicine, Kyushu University)
大腸癌再発症例における遺伝子変異の同定と転位パターンに関して
坂村 昭正, 長野 聡, 平井 秀成, 林 直樹, 黒田 陽介, 江口 茂利, 伊藤 優平, 堀田 陽, 杉村 圭史, 外 医夫, 三森 功士 (九州大学病院別院病院・外科, かかる研有病院外科, 福岡市民病院外科, 九州大学医学部・歯学講座)

P-1036 Identification of a germline nonsense mutation in MBD4 gene in a young colorectal cancer patient with multiple polyps
MBD4 ゲノムのクリンイチネオミノである変異を認めた若年大腸癌患者における遺伝子変異の同定
田中 福貴, 在間 謙明, 江口 真弓, 赤木 究, 立川 彰彦, 石田 秀成, 塚崎 康司 (埼玉医科大・ゲノム医科, RT 部門, 国立病院機構岩国医療センター外科, 埼玉県立がんセンター 胃腸診断, 予防科, 埼玉医科大・総合科, 消化器, 外科)

P-1037 Clonal changes of single nucleotide variants from primary to metastatic lesions in patients with colorectal cancer
Shoko Takarima, Satoshi Nagayama, Hidenari Hirata, Naoki Hayashi, Yohsuke Kuroda, Hitidetso Eguchi, Shuhei Ita, Takaaki Sakimura, Keishi Sugimachi, Sumio Hoka, Koshi Mimori (1 Dept. of Surgery, Kyushu University Beppu Hospital, 2 Dept. of Surgery, Cancer Institute Hospital, 3 Department of Surgery, Fukuoka City Hospital, 4 Department of Anesthesiology & Critical Care Medicine, Kyushu University)
大腸癌再発症例における遺伝子変異の同定と転位パターンに関して
前村 昭正, 長野 聡, 平井 秀成, 林 直樹, 黒田 陽介, 江口 茂利, 伊藤 優平, 堀田 陽, 杉村 圭史, 外 医夫, 三森 功士 (九州大学病院別院病院外科, かかる研有病院外科, 福岡市民病院外科, 九州大学医学部・歯学講座)

P-1038 Clonal evolution during the adenoma-carcinoma sequence in colorectal cancer
大腸癌の腺癌-腺癌変異におけるゲノム進化
齋藤 光正, 井川 俊平, 田中 哲也, 松本 昭宏, 前村 正太郎, 村上 和成, 三森 功士 (九州大病院別院病院・外科, 大分大・医科うぶた助教, 大腸・直腸外来講座)

P-1039 The pattern of clonal evolution in the colorectal carcinogenesis
大腸癌の進化パターン
申信, 金泰民, 安秀云 (1 微生物学科, 2 基因多型整合研究センター, 3 BK21 PLUS 連合健康科学プログラム, 手術外科, 医学情報学科, 癌進化研究センター, ハーモニーカー大学体育会)

P-1040 Exploring genomic profiles of high grade prostatic intraepithelial neoplasia and prostate cancer
Seung-Hyun Jung, Hyeon-Chun Park, Sun-Hee Jang, Sun-Ming Cho, Ki-Sung Kwon, Suhye Choi, Sug-Hyung Lee, Yeun-Jun Chung (1 Dept. of Microbiology, The Catholic University of Korea, 2 Department of Pathology, The Catholic University of Korea)
高浸潤度の異常細胞と前列腺癌のゲノムプロフィール
鄭垠 juin, 朴善均, 唐允信, 張善英, 韓世善, 蔡秀熙, 李修荣, 鄭允俊 (1 微生物学科, 基連大學食物科學院, 2 基連大學家院病院之病理研究所, 基連大學食物科學院)

P-1041 The risk of lymph node metastasis is not assessable by genomic copy number profile in gastric adenocarcinoma
Tu T. Duong, Diem TN. Vo, Takahisa Nakayama, Ken-ichi Mukaisho, Hiroyuki Sugihara (Dept. of Pathology, Shiga University of Medical Science)
胃癌リンパ節転移リスクはゲノムコピーナンバープロファイルで評価できない
杜光俊, 滝野武, 中山左一, 杉田裕秀, 串木喜生 (兵庫医科大学病理学教室, 兵庫医科大学)

P-1042 Comprehensive Sequencing Analyses of Uterine and Ovarian Carcinosarcoma
Osamu Gotoh, Yuko Sugiyama, Nobuhiro Takeshima, Yutaka Takazawa, Kosei Hasegawa, Keiichi Fujiwara, Tetsuo Noda, Seiichi Mori (JFCR, Genomic Ctr., 2 Dept. of Pathology, Shiga University of Medical Science)
子宮・卵巣がんの遺伝子組み換え解析
後藤 元, 菅原 頌子, 武岡 健典, 冨村 克己, 村田 俊夫, 野田 真男, 蛭崎 勲司 (1 JFCR 結び目, 2 兵庫医科大学病理学教室, 兵庫医科大学)

P-1043 Integrated analysis of somatic mutations and copy number alterations in ovarian clear cell carcinoma
Ryusuke Murakami, Noriomi Matsumura, Sachiko Kitamura, Ken Yamaguchi, Kaoru Akiho, Junzo Haminishi, Tsukasa Baba, Masaki Mandai, Ikko Konishi (Department of Gynecology and Obstetrics, Kyoto University, Department of Obstetrics and Gynecology, Kindai University Faculty of Medicine)
卵巣透明細胞癌における遺伝子変異とコピー数変動の統合解析
村上隆介, 松村 嘉之, 北村 幸子, 山口 聖, 安彦 弘, 湯浅 満, 長谷 陽, 万代 昌紀, 小西 迎 (1 京都大学大学院医学研究科, 2 玄海大学医学部, 3 大阪大学医学部)
P-1054 Genetic testing and characteristics of development of tumors in Li-Fraumeni syndrome

P-1055 PTC1 deletions detected in 9 families with nevoid basal cell carcinoma syndrome

P-1056 Integrity of TET dioxygenase activity determines leukemic transformation

P-1057 eIF1A2 is a target gene of DNA demethylating agents for improving anemia of MDS
Aiko Nagamachi, Hirotaka Matsu, Akinori Kanai, Yoshihisa Inaba (Radiation Research Center, RIRBM, Hiroshima Univ., Japan, Graduate School of Medical Sciences, Kumamoto Univ., Japan, Division of Molecular Oncology, RIRBM, Hiroshima Univ., Japan.)

P-1058 DNA/RNA demethylase ALKBH3 rescues DNA methylation damage through p53 signal transduction pathway in NSCLC cells.

P-1059 DNA methylation changes in hepatic normal tissues and tumor tissues in gestationally arsenite-exposed F2 mice

P-1060 Identification of aberrant DNA methylation associated with the development of colorectal traditional serrated adenoma

P-1061 Epigenetic regulation of the transcription variants of diacylglycerol kinase zeta in colorectal cancer

9 Epigenetics

Room P Oct. 6 (Thu.) 15:50-16:35

P9-1 DNA methylation (1)
DNA methylation (1)
Chairperson: Yoshimasu Saito (Div. of Pharmacotherapeutics, Keio Univ. Faculty of Pharm.)

座長：藤原義正（薬学大・薬学）
DNA methylation (2)

Keishi Yamashita, Satoru Ishii, Toshimichi Tanaka, Nobuyuki Nishizawa, Keigo Yokoi, Magoichi Sako, Toshikazu Ushijima, Naoko Hattori, Masahiko Watanabe

Screening of low molecule weight compounds inducing cancer cells to the demethylated process

Yoshitaka Ishihara, Norimasa Miura (Div.Pharmacotherapeutics, Dept. Pathophysiology & therapeutic science, Me d., Tottori Univ.)

がん細胞において脱メチル化を誘導する低分子化合物のスクリーニング

石原 敬貴，三浦 典正（鳥取大・医・病態解析医学・薬物療学）

Identification of novel DNA demethylation agents

Eriko Okochi-Takada, Naoko Hattori, Magoichi Sako, Toshikazu Ushijima


新規 DNA 脱メチル化剤の同定

大河内（高）江里子、服部 奈緒子、酒向 孫明、牛島 俊和（国立がん研究センター・研・エピゲノム）

Identification of a DNA methylation marker to estimate cancer cell content in lung cancer

Emi Kubo, Hiroaki Mieno, Hiromitsu Moriya, Masahiko Watanabe

（National Cancer Center Research Institute, Division of Epigenomics）

肺癌における腫瘍細胞量予測DNA メチル化マーカー開発

久保 萌絵、竹島 秀幸、牛島 俊和（国立がん研究センター・研・エピゲノム）

A subgroup of HIV-patients shows a DNA methylation profile similar to HIV-associated lymphoma

Akihiro Matsunaga, Masako Oka, Yukihito Ishizaka, Shimura Mariko

（Dept. Intractable Diseases, National Center for Global Health and Medicine）

HIV感染者末梢血中にみられるDNAメチル化パターンがHIVリンパ腫早期診断の可能性

松永 由弘、関 雅子、西谷 幸人、志村 まり（国立国際医療研究センター・難治性愛病）

DNA methylation of ZNF671 as a biomarker for early recurrence in serous ovarian cancer

Shoko Masu, Keishi Shinjo, Haruhito Totani, Shoichi Deguchi, Kei Katsushika, W.Y. Chan Michael, Mayumi Sugita, Yuuta Kondo


液性卵巣がんの早期再発を予知するDNAメチル化遺伝子の同定

関瀬 壽子、新町 恵子、戸谷 治仁、出口 彦一、勝島 啓彦、院医・遺伝子修復学、名古屋市立大・院医・産科婦人科学、"Dept. of Life Sci. Natl. Chung Cheng Uni"）

Clinical significance of Methylated CD01 in Primary Liver Cancer

Kazuharu Igarashi, Keishi Yamashita, Yousuke Ooizumi, Keita Kojima, Satoru Ishii, Toshimichi Tanaka, Nobuyuki Nishizawa, Keigo Yokoi, Magoichi Sako

（Div. of Epigenomics, Grad. Sch. Med. Sci., Nagoya City Univ.）

原発性肝癌におけるCD01遺伝子メチル化の臨床的意義

五十嵐 一晴、山下 隆善、大泉 陽介、小森 慶太、石井 剛、田中 俊道、西澤 伸恵、横井 智悟、谷村 菜穗子、加藤 弘、渡邊 昌彦（北里大学医学部・外科）

Utilization of DNA promoter methylation in gastric cancer clinics

Keiichi Yamashita, Keita Kojima, Hideki Ushikhu, Akira Ema, Kei Hosoda, Hiroki Mieno, Hirotsumi Moriya, Masahiko Watanabe

（Dept. Surg., Kitasato Univ. Sch. Med.）

プロモーターDNA メチル化が胃癌臨床における有用性について

山下 隆善、小森 慶太、牛久 秀樹、江間 玲、谷村 俊、三重野 浩朗、森谷 宏道、渡邊 昌彦（北里大・医・外科）

Genome Wide DNA Methylation Analysis in Remnant Gastric Cancer

Keiichi Sugimoto, Tomoaki Ito, Haimre Orita, Tomoyuki Kushida, Mutsumi Sakurada, Hiroshi Maekawa, Hirotsumi Komiyama, Makoto Takahashi, Michitoshi Goto, Yuichi Tomoki, Kazuhiro Sakamoto, Koichi Sato


残胃癌におけるゲノムワイドDNA メチル化解析

杉本 栄一、伊藤 智明、折川 創、柳田 誠志、田村 陸、前川 博、小見山 博、高橋 伸、杉本 信敏、荒木 裕司、坂本 一博、佐藤 浩一（順天大・医・下部消化管外科、順天堂静岡病院・外科）

Possibility of remnant gastric cancer onset prediction using a cancer-specific methylation

Keita Kojima, Keishi Yamashita, Kei Hosoda, Hirotsumi Moriya, Hiroki Mieno, Hidetsuki Ushikhu, Satoru Ishii, Keigo Yokoi, Toshimichi Tanaka, Nobuyuki Nishizawa, Kazuhiro Sakamoto, Yousuke Ooizumi, Masahiko Watanabe

（Surg. Kitasato Univ., Sch. Med.）

癌特異的メチル化を利用した残存胃癌発症予測の可能性について

小森 慶太、山下 隆善、細田 桃、森谷 宏道、三重野 浩朗、牛久 秀樹、石井 智、横井 智悟、田中 俊道、西澤 伸恵、五十嵐 一晴、大泉 陽介、渡邊 昌彦（北里大・医・外科）

Tumor Response to Systematic Chemotherapy could be Estimated by A Novel Circulating Cell Free DNA-Based Assay

Toshima Takashiki, Takeshi Nagasaka, Keisuke Kimura, Kazuya Yasui, Takashi Kawai, Yoshiaki Mori, Toshiyoshi Fujiwara

（Department of Gastroenterology, Okayama University Medical School）

循環する細胞フリーダNAのメチル化解析による大腸癌化学療法の治療効果判定の新援

戸塚 俊明、永木 岳司、木村 智好、安井 和也、河合 毅、母里 淑子、藤原 俊弥（岡山大学消化器外科）

Hypermethylation of CD01 promoter region is associated with higher chemosensitivity of Stage III colon cancer

Keigo Yokoi, Keishi Yamashita, Satoru Ishii, Toshimichi Tanaka, Nobuyuki Nishizawa, Kazuhiro Igarashi, Yousuke Ooizumi, Keita Kojima, Naoko Minatani, Hiroshi Katoh, Masahiko Watanabe

（Department of Surgery, Kitasato University School of Medicine）

CD01遺伝子プロモーター領域のメチル化はStage III結腸癌における抗がん剤感受性亢進と相関する

横井 智悟、山下 隆善、石井 智、田中 俊道、西澤 伸恵、五十嵐 一晴、大泉 陽介、小森 慶太、南谷 菜穂子、加藤 弘、渡邊 昌彦（北里大学外科）

Clinical significance of LINE-1 and ESR1 methylation levels in ulcerative colitis associated neoplasia.

Yuji Toiyama

（Department of Surgery, Kitasato University School of Medicine）

潰瘍性大腸炎粘膜におけるLINE-1 ならびにESR1 メチル化レベルの臨床的意義

関山 裕二、廣 純一郎、小林 奈奈子、荒木 俊光、大北 嘉基、井上 卓浩、毛利 順樹、橋 亜人（三重大学大学院 消化器小児外科学）
10 Invasion and metastasis

Chairperson: Shiro Suetsugu (Grad. Sch. of Biol. Sci., NAIST)

座席：末次 志郎（奈良先端大・バイオ・分子医学分野生物学）

P-1079 Epithelial to mesenchymal transition in clear cell renal cell carcinoma with rhbroid features
Masaaki Suga1,2, Kenichi Kohashi3, Masaki Shiota4, Kentaro Kuroiwa, Seiji Naito5, Yoshinaga Oda6 (1Dept. Urology, Kyushu Univ., 2Dept. Anatomic Pathol. Kyushu Univ., 3Div. Urology Harasahin Hosp.)

横紋筋肉腫様変化を伴う腎細胞癌における上皮間葉転換の検討
杉本 昌賢1,2, 染木 塙一1,2, 塩谷 真之1,2, 黒岩 順太郎3, 鹿沼 博之3, 小田 義光1,2 (九州大学・医学・新潟大学医学部・病態機能病理学

P-1080 Peritoneal dissemination requires an Sp1-independent CXC4/CXCL12 signaling axis and sphere formation
Yui Hatada, Yuta Kasagi, Yosuke Morodomi, Yoshikazu Yonemitsu (UTS, Kyushu University Graduate School of Pharmaceutical Sciences)

Penn center for molecular studies in digestive and liver diseases, (1Department of Cancer Biology, The Scripps Research Institute)

腹膜播種の全解明—Sp1にカルコカルツシールドを介したフルーパリア形態化
原田 恵1, 穴井 英明1, 望月 洋介1,2, 今井 謙1 (九州大学・薬・新サバイオワ医学・治療分子研究センターガ・スタンプラリ研究所・がん生物学分野)

P-1081 Is SMAD4 related to the spheroid formation of pancreatic cancer cells?
Eri Kokaji, Takeshi Nishida, Johji Imura (Dept. Diag. Pathol., Grad. Sch. Med., Univ. of Toyama)

SMAD4は癌細胞のSpheroid形成に関与するか？
佐賀 一成1,2, 西田 賢志1,2, 井村 正二（福山大・院・医・病理診断）

P-1082 Phosphorylated HSP20 (HSPB6) Regulates Migration and Invasion of Hepatocellular Carcinoma Cells
Rie Matsushima-Nishiwaki1,2, Hidenori Toyoda1,2, Takeshi Nishida1,2, Johji Imura1 (1LITS, Kyushu University Graduate School of Pharmaceutical Sciences, 2UTS, Kyushu University Graduate School of Pharmaceutical Sciences)

肝細胞癌の侵襲と細胞運動を制御するホスファチル化HSP20（HSPB6）
松島 剛1,2, 行田 敬1,2, 今村 栄1,2, 藤田 直1 (九州大学・薬・新サバイオワ医学・治療分子研究センターガ・スタンプラリ研究所・がん生物学分野)

P-1083 SH3P2 suppresses cell motility by anchoring Myosin 1E in the cytosol
Susumu Taninuma1,2, Michiaki Kohno1, Kohsuke Takeda1 (Dept. Cell Reg., Grad. Sch. Biomed. Sci., Nagasaki Univ., 3NRIC)

SH3P2はMyosin 1Eを細胞質に固定することで細胞運動を抑制する
田沼 健1,2, 高野 貞1,2, 武田 晃1 (長崎大学・医学部・細胞制御、3長崎大学・がん・ゲノム不安定性研究拠点)

P-1084 Knockdown of superoxide dismutase 2 (SOD2) reduced the invasive ability of human melanoma cells.

スーパーオキシドダムラセート2の発現抑制はヒトメラノーマ細胞の浸透能を低下させる
工藤 亜利沙1, 村田 孝1 (秋田県大・生物資源・分子生物)

P-1085 Exploring serum factors for evoking and promoting cancer metastasis.
Akira Yamashita1, Masahiro Yamamura1, Naoki Katase1, Yoshiyuki Yamaguchi1 (Kawasaki Medical School, Biochemistry, 1Kawasaki Medical School, Clinical Oncology, 1Kawasaki Medical School, Molecular Biology)

癌転移を惹起・増強する血清細胞因子
山内 明1, 山村 真1,2, 井村 直樹1,2, 山口 佳之2 (川崎医科大学生涯教育、川崎医科大学臨床腫瘍学教室、川崎医科大学分子生物学教室)
P-1098  
Radiation-induced cancer spreading mechanism; stimulation of compensatory proliferation during apoptosis by RhoGDIbeta  

P-1097  
CEACAM1 cytoplasmic domain isoform balance is associated with differentiation and poor survival of gastric cancer  

P-1096  
Intratumoral injection of 2',3'-cGAMP suppresses the role of ATF5 in cancer cell invasion of several diverse human cancer cell lines  
11 Characteristics of cancer cells

Chairperson: Yoko Katsuno (Dept. of Mol. Pathol., Grad. Sch. of Med., The Univ. of Tokyo)

Seat: 高橋 直子（東京大・院医・分子病理）

P-1104 Gene expression analysis of artificially developed cancer stem cells using spherical self-organization map

球面自己組織化マップを利用して人工癌幹細胞発現遺伝子解析

P-1105 Isolation and characterization of cancer stem cells from primary human endometrioid adenocarcinoma
Yuta Tabuchi, Yoshihiro Hirobaki, Takayuki Kakeishi, Tomohide Tsukahara, Hiroko Asanuma, Toshiko Torigoe(1st Dept. of Pathology, Sapporo Medical Univ.)

子宮体癌初期培養細胞株からの癌幹細胞の分離同定と解析

P-1106 Aldehyde Dehydrogenase Activity Plays No Role for Cancer Stem-Like Properties in Anaplastic Thyroid Cancer Cell Lines

アルデヒドデヒドロゲナーゼは乳がんの癌幹細胞性を司らない

P-1107 Clinical significance of cancer stem cell markers (ALDH1 and CD133) in the patients with lung adenocarcinoma

肺がんにおける癌幹細胞マーカー（ALDH1、CD133）の意義

P-1108 Evaluations of aldehyde dehydrogenase-1 (ALDH1) and TP53 expressions in human lung adenocarcinoma

アルデヒドデヒドロゲナーゼ-1（ALDH1）とTP53発現の意義検討

P-1109 ADAM23 (a disintegrin and metalloproteinase 23) downregulated in side population islands withstand lung carcinoïd cell metastasis

ADAM23（アルデヒド脱水素酵素23）が肺がん癌島の側面幹細胞を下げる
Side population において発現抑制されているADAM23 は、肺
癌の転移を抑制している
大田 正信1,2, 望月 早月3,4, 下田 将之5, 阿部 仁3, 木村 弘3, 関田 保典3 (1) 福島県総合医師センター - 郷内 - 福島県医 大 - 医 - 第 2 内科. 1慶大 - 医 - 類大 院 - 医 - 運動神経性疾患病態学講座

P-1110 Tobacco specific nitrosamine NNK increases cancer stem cells via Wnt signaling.
Naoya Hirata, Yasunari Kanda (Div. Pharmacoel., NIHs)

P-1111 AMPK confers metabolic stress resistance to acute myeloid leukemia-initiating cells
Yusuke Saito, Kornhiro Morishita1, Daisuke Nakada1 (Molecular and Human Genetics, Baylor College of Med., 2Tumor and Cellular Biochem., Dept. of Med., Univ. of Miyazaki)

P-1112 Doxycline targets mitochondria of Cancer stem like cells and causes apoptosis through ER stress.
Takashi Matsumoto1, Keisuke Monji2, Masaki Shiota, Akira Yokomizo, Masatoshi Eto, Seiji Naito, Takeshi Uchiumi1 (Department of Clinical Chemistry and Laboratory Medicine, Kyushu University, 2Research Center for Innovative Cancer Biochem., Dept. of Med., Kyushu University)

P-1113 Inhibition of liver tumor development in CD44 knockout mice

P-1114 Sulfasalazine targets the xCT-CD44v9 system inducing oxidative stress-mediated apoptosis in liver cancer cells
Fumita Wada1, Hirohori Kogo1, Jun Akiba1, Yu Ikezono1, Toru Nakamura1, Hideki Iwamoto2, Takahito Sakaue1, Atsuta Masada1, Mitsuhiko Abe1, Hiroshi Yano1, Takushi Torimura1 (Div. of Gastroenterol, Kurume Univ., 2Research Center for Innovative Cancer Therapy, Kurume University, 3Department of Pathology, Kurume University School of Medicine)

P-1115 Hepatic carcinomatous cells originate from EpCAM-positive hepatic stem/progenitor cells
Tomonori Matsumoto1, Atsushi Takai1, Yuji Eso1, Tsutomu Chiba1, Hiroshi Seno1, Hiroyuki Marusawa1 (Dept. Gastroenterology and Hepatology, Kyoto Univ., Grad. Sch. Med., 2Sogoseizongakkan, Kyotou Univ., Grad. Sch.)

P-1116 Inhibitory effect of hybrid liposomes on the growth of liver cancer stem cells
Yuki Komizu1, Seiichi Ishida1, Ryuichi Ueoka1, Yoko Matsumoto1, Taku Matsushita1 (Div. of Appl. Life Sci., Sojo Univ., 2Div. of Pharmacology, Chiba Cancer Ctr., 3Research Institute of Med. Sci., Chiba Cancer Ctr.)

P-1117 CWP232228 targets liver cancer stem cells through Wnt signaling: a novel therapeutic approach for liver cancer treatment
Hwayong Lee1, Ji-Young Kim1, Kwangyu Park1, Yangkyu Choi1, Jeongseok Nam1, Insun Hong1 (The Faculty of Liberal Arts, Jungwon Univ., 2Lee Gil Ya Cancer and Diabetes Inst. Gachon Univ., 3Department of College of Veterinary Medicine. Konkuk Univ., 4Department of Path. College of Med. Catholic Univ., 5Sch. of Life Sci. Gwangju Inst. of Sci. and Tech., 6Department of Mol. Med. Sch. of Med. Gachon Univ.)

P-1118 Macrophage migration inhibitory factor (MIF) supports the cell proliferation in brain tumor-initiating cells

P-1119 Novel CD133 transcription pathway for regulating stemness of neuroblastoma

P-1120 Hedgehog/GLI and mTOR signals in pancreatic cancer stem cells
Shyuichiro Matsubara1, Koichiro Tsukasa1, Yumi Miyazaki1, Toru Obara1, Takami Matsuyama, Sonshin Takao (Cancer & Regenerative med. Kagoshima Univ. Sch. Med.)

P-1121 siRNA therapy targeting PRDM14 decreases cancer stem-like phenotypes including liver metastasis of pancreatic cancer
Chiharu Moriya1, Hiroaki Taniguchi1, Kohzoh Imai1 (Ctr. for Antibody & Vaccine Therapy, IMS, Univ. of Tokyo, 2Inst. of Med. Sci., Univ. of Tokyo)

P-1122 siRNA therapy targeting PRDM14 decreases cancer stem-like phenotypes including liver metastasis of pancreatic cancer
Chiharu Moriya1, Hiroaki Taniguchi1, Kohzoh Imai1 (Ctr. for Antibody & Vaccine Therapy, IMS, Univ. of Tokyo, 2Inst. of Med. Sci., Univ. of Tokyo)

P-1123 Cancer stem cell (3)
Chairperson: Hideaki Iijichi (Dept. of Clin. Nutr. Ther., The Univ. of Tokyo)

P-1124 Cancer stem cell (2)
Chairperson: Kenkichi Masutomi (Div. of Cancer Stem Cell/Natl. Cancer Ctr. Res. Inst.)

座長: 増野 健司 (国立がん研究センターレ、がん幹細胞)

座長: 増野 健司 (国立がん研究センターレ、がん幹細胞)
P-1127 PGE2-ALDH1 signaling promotes the clonogenic growth potential in pancreatic ductal adenoocarcinoma
Kota Arima1, Takatsugu Ishimoto2, Masaki Ohmura1, Keisuke Miyake1, Tsugio Eto1, Takayoshi Kaida1, Takaaki Higashi1, Hirohisa Okabe1, Hideyoshi Nittai1, Daiuse Hashimoto1, Akira Chikama1, Yoichi Yamashita1, Hideo Baba1 (Dept. Gastroenterol. Surg., Grad. Sch. Med., Kumamoto Univ., Inst. Resource Dev. Analysis, Kumamoto Univ.)

P-1128 Expression of CD133 in exosomes derived from ascites of patients with advanced pancreatic cancer
Takahiko Sakane1,2, Hironori Koga1, Masaru Fukahori1, Toru Nakamura1, Yu Ikezono1, Fumitaka Wada1, Hideki Iwamoto1, Atsutsuka Masuda1, Takui Torimura1,2 (Div. of Gastroenterology, Kurume Univ. Sch. Med., Res. Ctr. for Innovative Cancer Therapy, Kurume Univ., Ctr. for Multidisciplinary Treatment of Cancer, Kurume Univ.)

P-1129 Ganciclovir Enhances Kras-MEK-induced MMP-10 Expression in ganciclovir-resistant Pancreatic Tumor-Initiating Cells
Nozomi Kojima1, Makoto Miyoshi1, Satoshi Nishiyama1, Yuka Tsuchida1, Shun Osaki1, Yuichi Hori1 (Dept. Biophysics, Kobe Grad. Sch. Health Sci.)

P-1130 Selectively upregulated miR-221 regulates the clonogenicity of human colon cancer stem cells

P-1131 Enhanced autophagy in colorectal cancer stem cells does not contribute to radio-resistance
Chen Yan1, Tao-Sheng Li (Dept. of Stem Cell Biol., ABDI, Nagasaki Univ.)

P-1128 Immunological Aspects of Colorectal Cancer Stem Cells

P-1129 The significance of the expression of a cancer stem cell marker Dclk1 in KRAS mutant colorectal cancer
Shumichiro Makino1, Hidekazu Takahashi1, Naotugu Haraguchi1, Junichi Nishimura1, Taishi Hata1, Tunekazu Mizushima1, Hirofumi Yamamoto1, Yuihiro Doki1, masaki mori (Osaka University, Graduate School of School of Medicine, Department of Gastroenterological Surgery, OsakaUniversity, Department of Therapeutics for Inflammatory Bowel Diseases, Osaka University Graduate School of Medicine, Division of Health Sciences)

P-1130 Serum depletion induced cancer stem cell-like phenotype due to nitrite oxide synthesis in H-Ras(G12V) transformed cells
Keisuke Moni1, Takeshi Uchiyumi1, Takashi Matsumoto1, Masaki Shiotar1, Akira Yokomizo1, Masatoshi Eto1 (Clin. Chem. and Lab. Med., Kyushu Univ., Sch. Med., Dept. of Urology, Kyushu Univ., Sch. Med.)

P-1131 Single cell based cell fate analysis of podoplanin-positive tumor initiating cells(TICs)
Tomoyuki Miyashita1, Yui Higuchi1, Motohiro Kojima1, Atsushi Ochiai2, Genichiro Ishii1 (Lab. of Cancer Biol., Frontier Sci., The Univ. of Tokyo, Div. of Pathology, EPOC, Natl. Cancer Ctr.)

P-1126 Esophageal cancer stem cells are suppressed by Tranilast, TRPV2 channel inhibitor
Michihiro Kudou1, Atsushi Shiozaki1, Daiuse Ichikawa1, Hiroki Shimizu1, Tomohiro Arita1, Yoshiyuki Kosuga1, Hirokita Konishi1, Satoshi Kato1, Kasuma Natsui1, Hiroshi Fujiiwa1, Kazuma Okamoto1, Yoshinori Marunaka1, Eigo Otsuji1 (Dept. Surg., Div. Dig. Surg., Kyoto Pref. Univ. Med., Dept. Mol. Cell Physiol., Kyoto Pref. Univ. Med.)

P-1132 Dissecting molecular mechanisms underlying CAF-induced metastatic dissemination of human breast carcinomas
Nadila Wali1, Yuko Matsumura1, Yasuhiko Ito1, Kaoru Mogushi1, Yasuhiro Terao1, Satoru Takeda1, Ko Okumura1, Kazuyoshi Takeda1, Okio Hino1, Akira Orimo1 (Dept. of Molecular Pathology, Juntendo University Faculty of Medicine, Dept. Obstetrics and Gynecology, Juntendo University Faculty of Medicine, Atyp Research Center, Juntendo University Faculty of Medicine, Genome regeneration Medical center, Juntendo Univ.)

P-1127 Involvement of PERK in metabolic stress-induced downregulation of cancer stem cell marker LGR5
Yuka Okamoto1, Masaru Koido1, Ikuo Nagasawa1, Akhiro Tomida (Genome Research, Cancer Chemotherapy Center, Japan)

P-1128 ganciclovir and podoplanin-negative LGR5+ cells contribute to radio-resistance
Chen Yan1, Tao-Sheng Li (Dept. of Stem Cell Biol., ABDI, Nagasaki Univ.)

P-1129 Immunological Aspects of Colorectal Cancer Stem Cells

P-1130 Selectively upregulated miR-221 regulates the clonogenicity of human colon cancer stem cells

P-1131 Single cell based cell fate analysis of podoplanin-positive tumor initiating cells(TICs)
Tomoyuki Miyashita1, Yui Higuchi1, Motohiro Kojima1, Atsushi Ochiai2, Genichiro Ishii1 (Lab. of Cancer Biol., Frontier Sci., The Univ. of Tokyo, Div. of Pathology, EPOC, Natl. Cancer Ctr.)

P-1132 Dissecting molecular mechanisms underlying CAF-induced metastatic dissemination of human breast carcinomas
Nadila Wali1, Yuko Matsumura1, Yasuhiko Ito1, Kaoru Mogushi1, Yasuhiro Terao1, Satoru Takeda1, Ko Okumura1, Kazuyoshi Takeda1, Okio Hino1, Akira Orimo1 (Dept. of Molecular Pathology, Juntendo University Faculty of Medicine, Dept. Obstetrics and Gynecology, Juntendo University Faculty of Medicine, Atyp Research Center, Juntendo University Faculty of Medicine, Genome regeneration Medical center, Juntendo Univ.)
P-1134 MICAL3 regulates symmetrical cell division of human breast cancer stem cells.
MICAL3は乳がん幹細胞の対称分裂を制御している。
富永 香菜,1,2, 金内 一, 3, 矢野 正雄, 4, 川村 利久, 5, 多田 敬一郎, 6, 東條 有,1,2, 後藤 典子,1,2, 6, 東大, 医科系, 分子治療, 日本学会創薬委員会, 公立昭和病院, 乳腺内外分泌外科, 4' 3, 新潟病院,外科, 5, 東京, 乳腺内外分泌外科, 6, 金沢大, がん前進制御研究所, 分子病態)

P-1135 GDF15 promotes mammosphere formation in breast cancer.
GDF 15は乳癌においてスフェア形成を促進する。
笛原 麻子,1,2, 高永 香菜,1,2, 金内 一, 3, 篠川 泰之, 東條 有,1,2, 後藤 典子,1,2, 6, 東大, 医科系, 分子治療, 東大, 院医, 乳癌代謝療法内外分泌外科, 4' 3, 新潟病院, 乳腺内外分泌外科, 5, 東京, 院医, 6, 金沢大, がん幹細胞研究所, 分子病態)

P-1136 DYRK2 contributes to the generation of breast cancer stem cells through KLF4
乳腺癌細胞においてDYRK2はKLF4を介して幹細胞性を制御する。
井原 良美,1,2, 三本 靖,3, 井山 乃里子,1,2, 吉村 深治,1 (5, 5, 臨床医,6, 医学部,6, 6, 臨床医学,6, 6, 臨床医学,6, 6, 臨床医学)

P-1137 Maintenance of stemness of breast cancer cells by FRS2beta during mammary tumorigenesis
乳癌におけるFRS2betaによる癌幹細胞性の維持機構
木村 奈津子,1, 駒田 真那,2, 倉田 靖,3, 町田 慎真,1, 東條 有,1,2, 吉村 進昭,1,2, 赤西 亮一,1, 佐藤 秀行,2, 北林 一生,2, 後藤 典子,1,2, 6, 東大, 医科系, 分子治療, 東大, 医科研, 発生工学, 9, 九大, 医, 病態感染内科, 10, 慶應大, 医, 先端医, 12, 他国がん研究,13, 研究所, 高血压腫瘍, 14, 金沢大, がん前進制御, 分子病態)

P-1138 The role of histone demethylase KDM4b in breast cancer stem cell
Akiyoshi Komuro, Kazushige Ota, Hitoshi Okada (Div. of Biochem., Faculty of Med., Kindai Univ.)
乳がん幹細胞におけるHistone demethylase KDM4bの役割
古田 雅也,1, 田村 一成,1, 冈田 宏 (近畿大学 医学部 生化学)

P-1140 High expression of serine protease inhibitor is a novel indicator of stem cell tumorigenicity
In Sun Hong1, Na-Hee Lee2, Jeong-Seok Nam3 (1' Lee Gil Ya Cancer and Diabetes Inst., Gachon Univ., 2' Dept. of Mol. Med., Sch. of Med., Gachon Univ., 3' Sch. of Life Sci., Gwangju Inst. of Sci. and Tech.)
高表現のセリンプロテアーゼ阻害因子は新しい幹細胞性の指標。

P-1141 Daunorubicin induces caspase-independent apoptosis in a cancer stem cell model.
ダウノルビシンがこれで干細胞モデルにおけるダウノルビシンによるカスパス非依存性致死を誘導する。
水谷 昭文, 水谷 昭文, 相澤 一輝, 尾下 彩穂, 増田 直子, 秋田 彰正, パイディアナス アル, 円井 智成, 村上 宏, 姫居 昌治 (岡山大, 自然科学, 医用生命工学)

P-1142 Cytotoxic effects of bleomycin (BLM) on cancer stem cells originating from BLM-resistant murine tumor
Jiro Fujimoto (Hyogo Prefecture Health Promotion Association)
プレオマイシン耐性マウス腫瘍のがん幹細胞プレオマイシンが効く
藤本 元 (兵庫県健康財団)

P-1143 Expression of drug resistance genes associated with hypoxia.
Yukiko Nakahara1, Motofumi Koguchi1, Hiroshi Ito1, Tomihiro Wakeyama1, Ikuko Morisaki1, Tatsuya Abe1 (1' Dept. of Neurosurg, Faculty of Med. Saga Univ., 2' Dept. of Neurosurg, Faculty of Med. Oita Univ.)
低酸素状態における薬剤耐性遺伝子発現の検討
中原 由紀子,1, 高口 素,1, 伊藤 翼,1, 若宮 高満1,2, 森崎 郎子,1, 松井 明1,2, 2, 佐賀 大, 医, 神経外科, 1, 医, 大, 医, 神経外科)

P-1144 A gastric cancer patient-derived cell model to investigate the relationship between cancer stemness and drug resistance
がん幹細胞性と薬剤耐性の結びつきを検証する患者由来胃癌細胞モデル
川上 隆1, 窪川 直1, 2, 右田 敏郎1, 2, 熊谷 厚志1, 2, 佐野 武1, 2, 沼倉 信1, 2, 山崎 研1, 2, 南山 宣1, 2, (1, 2, がん研, 1, 2, 臨床, 2, 生物治療, 共立大, 臨床医学領域, 医, がん分子標的, がん研, 2, 有明病院, 消化器外科, がん研, 2, 有明病院, 消化器内科)

P-1145 Clinical significance of CD44-positive cancer stem cells at invasion front of gastric cancer
胃癌浸潤前線におけるCD44陽性癌幹細胞の存在と臨床的意義
児玉 泰1, 2, 村田 聡1, 2, 田村 祐1, 2, 3, 藤間 典光1, 2, 杉村 眞1, 2, 3, 岩田 信子1, 3, 竹村 聡1, 3, 山本 賢1, 3, 賀井(滋賀大病院, 医学部, 腫瘍センター, 腫瘍医大病院, 病理部, 医療法人社団 賀兼会日野記念病院)
P-1146 Phenotypic analysis of Human colon cancer stem cell like cells and the search for the targets of CAR-T therapy

NKG2D / NKG2DL relation on gastric cancer
Tetsuhiro Asao1, Rie Ishibashi2, Masanori Fuse1, Kiyoshi Yoshimura2 (*Div. Cancer Immunotherapy, Natl. Cancer Ctr., 2Thorp Oncologic, Dept. Developmental Therap.)

Chemotherapeutic agent pretreatment enhances the γT cell cytotoxicity against urinary bladder cancer cells
Teruki Shimizu1, Makou Tomogame2, Osamu Ukumura2, Eishi Ashihara1 (*Dept. of Clinical and Translational Physioloogy, Kyoto Pharmaceutical University, *Dept. of Urology, Kyoto Prefectural University of Medicine)

Combination of HER family inhibitor and HER-3-targeted immunotherapy against head and neck squamous cell carcinoma
Takumi Kuma3, Kenzo Ohara1, Yui Hirata2, Takayuki Ohkuri1, Akemi Kosaka1, Toshihiro Nagato2, Kensuke Oikawa3, Yasuaki Furukawa1 (*Dept. of Biochem. II, Nagoya Univ. Grad. Sch. of Med., 2Dept. of Path, Asahikawa Med. Univ., 3Dept. Developmental Therap.)

γT cells exert cytotoxicity against cancer cells regardless of PD-1 expression in cancer cells
Mako Tomogame1, Teruki Shimizu1, Yuki Toda1, Kazuayuki Takata1, Eishi Ashihara1 (*Dept. of Clinical and Translational Physioloogy, Kyoto Pharmaceutical University, *Dept. of Urology, Kyoto Prefectural University)

Immune monitoring in patients with bone and soft tissue sarcomas

Immune monitoring in patients with bone and soft tissue sarcomas

Expression and roles of asialo-series gangliosides in human cancer cell lines
Rohini B. Bhuvan1,2, Yuji Kondo1,2, Tokiaki Yamaguchi2, Noriyo Tokuda1, Yuki Ohkawa3, Tulsukhe Omori4, Maiko Takano4,5, Pu Zhang6, Nobutoshi Esaki1, Yoshio Yamashita1, Keiko Furukawa1, Toru Okajima1, Koichi Furukawa1 (*Dept. of Biochem. II, Nagoya Univ. Grad. Sch. of Med., 2Dept. of Biomed. Sci., Chubu Univ. College of Life and Health Sci., 3Dept. of Biomed. Sci., Chubu Univ.)

Antitumor effector cells and their induction (1)
Hideaki Yagita (Dept. of Immunol., Juntendo Univ. Sch. of Med.)

Development of "TCR-multimer": Toward the evaluation of HLA/peptide complex presented on cell surface

Cancer immunology
Room P Oct. 6 (Thu.) 15:00-16:35 J/E
P12-1 Tumor antigen

Room P Oct. 6 (Thu.) 16:35-17:20 J
P12-2 Antitumor effector cells and their induction (1)

Cancer immunity
Room P Oct. 6 (Thu.) 15:00-16:35 J/E
P12-1 Tumor antigen
Chairperson: Hideaki Yagita (Dept. of Surg. & Bioengineering, ACRC, Inst. Med. Sci., The Univ. of Tokyo)
座长：田原 秀晃（东京大・先端研・脑器细胞学）
P-1159 PD-1 blockade enhances priming of effector T cells during homeostatic proliferation after cytotoxic therapy
Miho Takahashi, Satoshi Watanabe, Yoshiaki Kikuchi (Dept. of Renal Medicine, Niigata University, Japan)
PD-1 抗体療法は混溶細胞治療後の回復におけるエフェクター T 細胞の導入を増強する
高橋 美帆, 渡部 郁, 蒲池利明 (新潟大学, 呼吸器感染症内科)

P-1160 TCR sequencing of peptide-specific T cells in advanced colorectal cancer patients treated with cancer peptide vaccines
Kazuma Kiyotani, Kenji Tamura, Rui Yamaguchi, Seiya Imoto, Hiroko Takenouchi, Satoru Miyano, Shoichio Hazama, Yusuke Nakamura (Department of Medicine, The University of Chicago, USA)

ternal Medicine, University of Tokyo, Tokyo, Health Intelligence Institute, Institute of Medical Science, University of Tokyo, Yamaguchi University Graduate School of Medicine)

P-1161 Impairment of glucose metabolism in peripheral CD8+ T cells derived from cancer patients
Motosugu Watanabe1, Shingo Ikikawa, Nahoko Tomonobu, Yuji Kimura, Takenori Uehara, Yuki Kusunada, Shinnichiro Toyooka, Shinichiro Miyoshi, Heichiro Udo1 (Dept. Thoracic Surgery, Okayama Univ., Japan, Department of Internal Medicine, Okayama Univ., Department of Gastroenterology, Okayama Univ., Department of Orthopaedic Surgery, Okayama Univ., Department of Oral and Maxillofacial Surgery, Okayama Univ.)

P-1162 Metformin demands glucose for the maintenance of polyfunctional effector T cells in tumor microenvironment

P-1163 Cellular Adjuvant, Direct Cytotoxicity of Re-differentiated INKt-like Cells from Human Induced Pluripotent Stem Cells
Shiichiro Kiyotani1, Rong Zhang2, Shoichi Iriuchi3, Tatsuki Iwama1, Yasutaka Mizoroi1, Akira Watanabe1, Kiyotaka Kuzushima1, Yasushi Uemura1, Shin Kaneko1 (Center for iPSC Research and Application (CIRA), Kyoto University, Division of Immunology, Aichi Cancer Center Research Institute (ACCR), Aichi, Executive Research Organization & Clinical Trial Center, National Cancer Center (NCC))

P-1164 Characterization of immuno-suppressive NKT cells in mouse lungs
Shingo Kato1 (Vaccine Branch, NCI, NIH, USA, Gastroenterology and Hepatology, Yokohama City University, Japan)

P-1165 Combination Treatment of Bone Marrow DCs and X-ray Irradiation in a Melanoma Mouse Model
Yui Wang1, Ari angularer Rechclu1, Junko Zenkoh1, Xiaokang Li2, Koji Tsutai1 (Comprehensive Human Science, University of Tsukuba, School of Medicine and Medical Sciences, University of Tsukuba, Division of Radiation Safety, Kokuritsu Seikiku Medical Research Center Hospital)

P-1166 Phase I clinical study of CHP-NY-ESO-1 vaccine and a novel adjuvant MVIS416 for the patients with refractory UC or CRPC
Yasukata Tsuya1, Miyuki Ishihara1, Yoshihiro Miyahara1, Taizo Shirahara1, Eiichi Sato1, Shinichi Kageyama1, Naoyuki Katayama1, Hiroshi Shiku1, Yoshi Yagamori3, Subhi Segura1, Naoko Nishinaka1, Hiroshi Shikui1, Hiroshi Segura1, Yuki Sugimura1 (Department of Hematology & Oncology, Mie Univ., Graduate Sch. Med., Department of Cancer Therapy, Mie Univ. Hosp., Department of Immuno-Gene Therapy, Mie Univ. Sch. Med., Department of Path., Mie Univ. Hosp., Department of Nephro-Urologic Surgery and Andrology, Mie Univ. Sch. Med.)

P-1167 Establishment of an artificial CTL clone expressing the TCR highly reactive with autologous sarcoma stem cell antigen
Yui SHIRAYAMA1, Tomohide TSUKAHARA1, Yoshihiko TORIGO1 (Department of Pathology 1, Sapporo Medical University, Department of Orthopaedic Surgery, Sapporo Medical University)

P-1168 Development of new cancer peptide vaccine therapy that targets CXC14+ dendritic cell
Yuki Mizumoto1, Takanori Kusuda1, Motoki Miyazawa1, Yuji Kitaibata1, Ayako Tsumura1, Atsushi Miyamoto1, Mikihiro Nakamori1, Toshiyasu Ojima1, Hiroaki Hemi1, Tetsuya Kaisho1, Hiroki Yamada2 (2nd Department, Surgery, Wakayama Med. Univ., Department of Internal Medicine, Wakayama Med. Univ.)

P-1169 Evaluation of IgG response to prostate-related antigen of prostate peptide vaccination for metastatic recurrent breast cancer
Uchi Tobe1, Nobutaka Iwakuma1, Mina Okabe1, Shuko Sakai1, Momoko Akashi1, Yoshito Akagi2, Akira Yamada1, Shigeji Shijjiy1, Kyogo Itoh1 (Department, Surgery, Kurume Univ., Sch. Med., Innovative Cancer Research Center, Kurume Univ., Cancer Vaccine Center, Kurume Univ.)

P-1170 Evaluation of IgG response to prostate-related antigen of prostate peptide vaccination for metastatic recurrent breast cancer
Uchi Tobe1, Nobutaka Iwakuma1, Mina Okabe1, Shuko Sakai1, Momoko Akashi1, Yoshito Akagi2, Akira Yamada1, Shigeji Shijjiy1, Kyogo Itoh1 (Department, Surgery, Kurume Univ., Sch. Med., Innovative Cancer Research Center, Kurume Univ., Cancer Vaccine Center, Kurume Univ.)

P-1171 Combination Treatment of Bone Marrow DCs and X-ray Irradiation in a Melanoma Mouse Model
Yui Wang1, Arijangelar Gerechuln1, Junko Zenkoh1, Xiaokang Li2, Koji Tsutai1 (Comprehensive Human Science, University of Tsukuba, School of Medicine and Medical Sciences, University of Tsukuba, Division of Radiation Safety, Kokuritsu Seikiku Medical Research Center Hospital)
13 Growth factors/cytokines/hormones

Room P13-1 Growth- and differentiation-regulating factors

Chairperson: Yasufumi Sato (Dept. of Vasc. Biol., IDAC, Tohoku Univ.)

座長: 佐藤 晴史 (東北大学・加齢研究 • 腫瘍・感染症系)

P-1170 IGFl, IGFBP3 and the risk of esophageal cancer in a nested case-control study


IGF1, IGFBP3 and Esophageal Cancer Risk

足立 昌隆 1,2, 瀬尾 正顕 1,2, 山下 健太郎 1,2, 佐藤 木 1,2, 遠藤 好夫 1,2, 仲野 裕志 1,2, 坂田 晋美 1,2, 蛭田 朋子 1,2 (札幌医科大学・消化器内科, 2札幌さくら台病院・消化器科, 3東京大学・医学科学院, 4札幌医科大学・公衆衛生学, 5北海道大・医, 公衆衛生)

P-1171 A Dominant-negative FGFl2 Mutants Suppress Angiogenesis

Nobuaki Hatori, 1,2 Seiji Mori, 1,2 Nariaki Matsuura, 1,2 Hirofumi Yamamoto (Osaka, Univ.)

FGF22変異体は血管新生を抑制する

羽鳥 幹晃, 森 誠, 本川 泉生, 松浦 成男, 山本 浩文 (大阪大学)

P-1172 Possible association between gene amplification and intratumoral microvessel density in human gastric cancer

Hiroyuki Kohno, 1,2 Takeru Oyama (1Dept. Immunol., Kanazawa Med. Univ. Sch., 2Dept. Mol. and Cellular Pathol.)

ヒト胃癌におけるVEGF遺伝子増幅が腫瘍内微血管密度に関与する可能性に対する検討

黒野 裕之 1,2, 松山 正毅 1,2 (金沢医科大学・医, 免疫学, 2金沢大学・医, 分子細胞病理学)

P-1173 Status of E74-like factor 5 (ELF5) in Ductal Carcinoma in Situ

Takahisa Imamura, 1,2, Keiko Takano, 1,2, Keiko Furukawa, 1,2, Koichi Furukawa, 1,2 (1Dept. Biochem II, Grad. Sch. Pharm. Sci., Kyushu Univ., 2Res. Inst. Nozaki Tokushukai)

E74-like factor 5 (ELF5) in Ductal Carcinoma in Situ

今村 皆雅, 佐藤 祐子, 林 恵子, 田村 克光 (1鹿屋市立大学薬学部, 2鹿屋市立大学薬学部)

P-1174 Acidic microenvironment contributes the development of cancer malignancy via IL-8 production

Masako Nakanishi, 1,2 Yasuteru Muragaki (1Dept. Pathol., Wakayama Med. Univ.)

腫瘍内駆酸性微小環境がIL-8の発現誘導を介して悪性化に関与する

中西 雅子, 村垣 泰光 (和光大・医, 病理)

P-1175 GD3-expressing glioma reduce M1-like phenotypes of glioma-associated microglia/macrophages via inflammatory cytokines

Pe Zhang, 1,2 Yuki Ohkawa, 1,2 RH Builhian, 1,2 Yuhsuke Ohmi, 1,2 Maiko Takano, 1,2 Koichi Furukawa, 1,2 (1Dept. Biobehavioral Sci. II, Nagoya Univ.Grad.Sch. Med., 2College of Life and Health Sciences, Chubu Univ.)

グリオーマのGD3発現が混能マクロファージのM1型インフレラント cytokineを制御する

張 沛 1,2, 大川 耕佑 1,2, RH Builhian 1,2, 奥見 晃樹 1,2, 岩崎 欽平 1,2, 小林 進介 1,2, 高野 舞子 1,2, 古川 亜子 1,2, 古川 鐘 1,2 (名芸大学医学部第二病院, 2中部大学生命健康科学研究科)

P-1176 The C5a-C5a receptor system promotes cancer metastasis and C5a in the cancer microenvironment enhances cancer invasion

Takashia Imamura, 1,2 Masakazu Yoneda, 1,2 Yoshiaki Kawano, 1,2 Hideki Nakayama (1Dept. Mol. Pathol, Faculty Life Sci., Kumamoto Univ., 2Dept. Oral & Maxillofacial Surgery, Faculty Life Sci., Kumamoto Univ., 3Dept. Urology, Faculty Life Sci., Kumamoto Univ.)

C5a-C5a受容体系は癌転移を促進し、癌微小環境C5aは癌浸潤を亢進する

今村 浩治, 今田 睦一 1,2, 河野 吉章 1,2, 中山 秀樹 1,2 (熊本大・院・生命科学研究所・生化学, 2熊本大・院・生命科学研究所・歯牙口腔外科, 3熊本大・院・生命科学研究所・泌尿器科学)

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P-1184 The induction of androgen synthesis enzyme by Cancer-associated fibroblasts in estrogen receptor negative breast cancer
Kyoko Kikuchi1, Keely M McNamara1, Yasuhiro Miki2, Minako Sakurai, Yoshikazu Onodera1, Hirohito Suehisa1 (Dept. Pathol., Tohoku Univ., Sch. Med., Disaster Obstetrics & Gynecol., Tohoku Univ., IRIDE5)

P-1185 Escaping roles of TGF-β signals on cellular senescence induced by hormone ablation
Hiroshi Kawa1, Takeo Nakaya1, Akira Tanaka1 (Dept. of Pathol, Jichi Med Univ.)

P-1186 Effects of relaxin on endometrial cancer malignancy
Misaki Fue1, Yasuhiko Miyak2, Kiyoshi Taka1, Takashi Suzuki1, Kiyoshi Ito2 (Disaster Ob/Gyn, Int. Res. Inst. of Disaster Sci., Tohoku Univ., Pathol & Histotech, Tohoku Univ., Grad. Sch. Med.)

P-1187 Biological function of Glucocorticoid receptor (GR) in triple negative breast cancer
Yoko Takeda1, McNamara Kee M1, Tiffany Mori1, Minori Miyashita1, Noriko Nemoto1, Kentaro Tamaki1, Yoshikazu Sagara1, Yoshikai Rai2, Yasuyo Ohi1, Takanoi Ishida1, Noriaki Ohuchi1, Hirohito Suehisa1 (Tohoku University School of Graduate Medicine, Naha-nishi clinic, Sagara hospital,Kagoshima Japan)

P-1188 SOCS2-AS1, AR-targeted long non-coding RNA, promotes androgen signals and inhibits apoptosis in prostate cancer

P-1189 TGF-β-induced podoplanin expression is associated with EMT of human esophageal carcinoma TE-11 cells

P-1190 Effect of transforming growth factor-β (TGF-β) on drug-resistance of a human scirrhous gastric cancer cell line, HSC-39

P-1191 P-1189 -induced podoplanin expression is associated with EMT
Yasuyuki Saito1, Hiroshi Seino1, Yuji Sato2, Hiroko Murase1, Atsushi Koike3, Rie Tamaki1 (Tohoku University School of Medicine, Int. Res. Inst. of Disaster Sci., Tohoku Univ., Grad. Sch. Med., Kaisei Hospital, Kohrihori, Ito1 (Disaster Obstetrics & Gynecol., Tohoku Univ., Pathol & Histotech, Tohoku Univ., Grad. Sch. Med.)

P-1192 Determination of functional domains in Smads 3 by using synthetic peptide blockers
Mitsuyoshi Morohitsuki1, Massa Saito1, Keiichi Miyazawa (Dept. of Biochemistry, Tohoku Univ., Sch. Med.)

P-1193 Suppression of CBR1 induces EMT through TGFβ signaling in uterine cervical squamous cell carcinoma

P-1194 TGF-β signaling and PEG10 exhibit mutually opposite expression pattern and roles in cell invasion of chondrosarcoma

P-1195 Transforming growth factor-beta promotes cholangiocarcinoma cell invasion via Smad2/3 and ERK/2 pathways
Thapsimon Suthipongchao1, Phaijit Sritanapanuwat, Nuttaophorn Sueanggoen, Parichat Thummarati (Department of Biochemistry, Faculty of Science, Mahidol University, Bangkok, Thailand)
Gastric cancer (1)

The significance of gene amplification for VEGFA in human gastric cancers

Characterization of cancer stromal fibroblasts in primary sites of metastatic gastric cancer.

Incorporation of macrophages into tubular formation of lymphatic endothelial cells in gastric cancer

P-1202


Gastric cancer (1)

P-196

Overexpression of PCDH9 is associated with poor prognosis in gastric cancer


P-197

Significance of the preoperatively neutrophil-to-lymphocyte ratio in the short term outcomes of gastric cancer patients

Ryoichi Miyamoto, Satoshi Inagawa, Naoki Sano, Susuke Tadano, Masayoshi Yamamoto (Department of Gastroenterological Surgery, Tsukuba Medical Center Hospital)

P-199

Fukutin, identified by CAST method, participates in tumor progression in gastric cancer


P-2000

Genomic analysis of Alpha-Fetoprotein producing gastric cancer

Amane Tagashira, Shinichi Yachida, Miwako Kituchi, takahumi Rokutan, akimasa Hayashi, kenji Tatsuno, Shogo Yamamoto, Genta Nagase, Hiroyuki Abe, Shumpei Ishikawa, Tatsutomo Shibata, Masashi Fukayama, Hiroyuki Aburatani (Genome Science Division, RCAST, Tokyo Univ.; National Cancer Center Research Institute, Deparment of Pathology, Grad. Med. Tokyo Univ., Med. Research Institute Tokyo Med. and Dent. Univ.)

P-1201

The significance of gene amplification for VEGFA in human gastric cancers

Takeru Oyama, Ritsuko Nakamura, Akishi Ooi (Dept. Mol. Cell. Pathol., Kanazawa Univ.)

P-1203

Incorporation of macrophages into tubular formation of lymphatic endothelial cells in gastric cancer


P-1204

Significance of highly proliferative glands and tumor-associated macrophages for rapid progression of gastric adenocarcinoma


P-1205

Characteristics of poorly differentiated adenocarcinomas with loss of ARID1A expression in the stomach

Takahisa Nakayama, Ken-iichi Mukaisho, Takaniro Hattori, Hiroyuki Sugihara (Dept. of Path., Shiga Univ., Med. Sci.)

P-1206

Gene analysis of different histological subtypes in gastric cancer

Ritsuko Nakamura, Takeru Oyama, Akishi Ooi (Molecular and Cellular Pathology, Kanazawa University)

P-1207

Histopathology of hereditary diffuse gastric cancer in Japanese patients.

P-1208  Immunohistochemical study of γ-H2AX and p53 in human gastric cancer
Yuka Kiriyama, Takeshi Toyoda, Kumiko Ogawa, Tetsuya Tsukamoto

P-1209 Quantitative comparison between the stereoscopic image and the corresponding histology of human gastric cancer
Yusuke Fujita, Yoshinori Harada, Hideo Tanaka (Dept. Pathol. Pathol., Kyoto Pref. Univ. of Med.)

P-1210 EphA1-4 protein expressions correlated clinicopathological factors and survival in gastric cancer
Mikito Inokuchi, Sho Otsuba, Kazuyuki Kojima, Tatsumi Kawano
(Dept. of Gastrointest. Surg., Tokyo Medical and Dental Univ., 'Div. of Minimally Invasive Surg., Tokyo Medical abd Dental Univ.)

P-1211 Karyopherin alpha2 and karyopherin beta1 expression was associated with poor prognosis in gastric cancer
Yoshihito Ohhara, Ichiro Kinoshita, Yasushi Shimizu, Akira Suzuki, Hirotoshi Akita

P-1212 Somatic mutations in mucinous gastric carcinoma
Yoshiaki Hirokawa, Fumie Hosoda, Yasushi Takeda, Hiroshi Sasaki, Tetsuya Tsukamoto
(1Dept. of Translational Oncology., Natl. Cancer Ctr. Res. Ctr., 'Div. Pathology, Univ. of Tokyo, 'Div. Pathology, Univ. of Tokyo, 'Div. Pathology, Univ. of Tokyo, 'Div. Pathology, Univ. of Tokyo, 'Div. Pathology, Univ. of Tokyo)

P-1213 SETDB2 contributes to gastric cancer progression by deregulating the expression of tumor suppressor genes
Nishikawaji Taketo, Yoshibumi Akiyama, Shu Shimada, Yasuhito Yasui, Shinya Tanaka (Dept. Med. Oncol., Tokyo Med&Dent Univ.)

P-1214 Omics analysis focused on peritoneally-metastasized cancer cells in diffuse-type gastric cancer
Masayuki Komatsu, Hiroshi Sakamoto, Fumiko Chiwaki, Hitoshi Ichikawa, Rie Komatsuzaki, Tetsuya Hamaguchi, Narikazu Boku, Takashi Kono, Keisuke Matsusaka, Atsushi Ochiai, Teruhiko Yoshida, Hiroki Sasaki

P-1215 HER2 gene amplification in early gastric cancer
Kanayama Kazuki, Hiroshi Imai, Eri Usugi, Taizo Shiraiishi, Yoshifumi Hirokawa

P-1216 Expression and localization of KIFC1 and its association with cancer stem cell in esophageal squamous cell carcinoma
Yui Hattori, Naohide Oue, Takuya Hattori, Takeharu Imai, Naoya Sakamoto, Kazuhito Sentani, Wataru Yasui (Dept. of Mol. Pathol., Hiroshima Univ.)

P-1217 The association between the expression of cancer/testis antigens and Helicobacter pylori infection in gastric cancer.
Kei Hosoda, Takashi Fukuyama, Akira Ema, Keiichi Yamashita, Nobuue Futawatari, Yoshitomo Takahashi, Masahiko Watanabe

P-1218 Omics analysis focused on peritoneally-metastasized cancer cells in diffuse-type gastric cancer
Masayuki Komatsu, Hiroshi Sakamoto, Fumiko Chiwaki, Hitoshi Ichikawa, Rie Komatsuzaki, Tetsuya Hamaguchi, Narikazu Boku, Takashi Kono, Keisuke Matsusaka, Atsushi Ochiai, Teruhiko Yoshida, Hiroki Sasaki

P-1219 Fusion gene analysis of diffuse-type gastric cancer
Ayano Doi, Sachio Mitani, Hiromi Sakamoto, Fumiko Chiwaki, Takashi Kubo, Hiroki Sasaki, Teruhiko Yoshida, Hitoshi Ichikawa
P-1211
Significance of Dyrk2 and HMGB1 as chemoresistance factors in gastric cancer
Yuuki Nishiguchi1, Rina Fujisawa1, Takamitsu Sasaki1, Tomonori Saishahira1, Yoshiyuki Nakajima1, Hiroki Kuniyasu1

P-1212
Hypotonic stimulation enhances cellular uptake and cytotoxic effect of paclitaxel in gastric cancer cells
Toshiyuki Kosuga, Atsushi Shiozaki1, Daisuke Ichikawa1, Tomohiro Arita1, Hitoshi Fujiwara, Eigo Otsuji

P-1213
HIF-1α inhibitor YC-1 plus GI treatment is a promising drug therapy targeting Warburg effect in gastric cancer.
Kota Wakiyama, Yoshihiko Kitajima1, Tomozaku Tanaka, Masao Kaneki1, Koichi Baba, Hirofumi Sato1, Jun Nakamura1, Kazuyoshi Yanagihara1, Hirokazu Noshiro1

P-1214
Functional and genetic analysis of Nexo 1/ROS in inflammation-associated gastric tumor development
Kanae Echizen, Hiroko Oshima, Masanobu Oshima

P-1215
Identification of a long noncoding RNA associated with chronic gastritis and gastric cancer
Hisanori Kitajima1, Reo Maruyama1, Eiichiro Yamamoto1, Takeshi Niiyama1, Hironori Aoki, Taku Harada1, Masahiro Kai1, Hiroshi Nakase1, Takashi Tokino, Izumi Suzuki

P-1216
Effectiveness of intraperitoneal administration of plasma activated medium in mouse models.
Shigeomi Takeda, Suguru Yamada, Mitsuo Kanda, Chie Tanaka, Goro Nakayama, Masahiko Koike, Michitaka Fujiwara

P-1217
High risk mucosa after helicobacter eradication
Kousuke Takeda1, Rina Fujisawa1, Yukiko Nishiguchi1, Takamitsu Sasaki1, Hiroshi Yoshiji1, Hiroki Kuniyasu1

P-1218
Morphology of gastric cancer cells using a silicate fiber scaffold for three-dimensional cell culture system
Ken-Ichi Mukuash1, Shunpei Kanai1, Hiroto Yamamoto1, Masahiro Nai1, Takahisa Nakayama1, Takuya Iwasar1, Takahiro Hattori, Hiroyuki Sugihara1

P-1219
FOX2, a Potential Prognostic Marker in Esophageal Cancer.
Kosuke Takato1, Naohiro Nishida1, Kishi Mimori1, Yuichiro Doki1, Masaki Morii1, Hideshi Ishii1, Kazuhiko Ogawa1

P-1220
Impact of Anion Exchanger 2 Expression in Human High risk mucosa after helicobacter eradication
Chairperson: Hisahiro Matsubara (Dept. of Frontier Surg., Chiba Univ., Grad. Sch. of Med)
P-1233 Prognostic value of hematological parameters in patients undergoing esophagectomy for esophageal squamous cell carcinoma
Noritoyo Noriyuki, Yusuke Fujii, Yoshitaugu Tajima (Dig and Gene Surg, Shumane Univ., Fac. Med.)

P-1234 IL-8 derived from TAMs promotes cell migration and invasion of human esophageal cancer cells
Masayasu Hosono1, Masayuki Doi1, Nobuhide Higashino1, Himiko Kodaira1, Yumi Ichihara1, Nobuhisa Takase1, Mari Nishio1, Manabu Shigeoka1, Yuichiro Koma1, Hiroshi Yokozaki1 (Path., Kobe Univ., Sch. Med., ‘Gastrointest. Surg., Kobe Univ., Sch. Med.’)

P-1235 Role of Ncam in cell survival and migration of TAMs in human esophageal squamous cell carcinoma
Himiko Kodaira1, Nobuhisa Higashino1, Nobuhisa Takase1, Maiko Okamoto1, Masayuki Doi1, Mari Nishio1, Manabu Shigeoka1, Yuichiro Koma1, Hiroshi Yokozaki1 (‘Div. Path., Kobe Univ., Sch. Med., ‘Gastro-intestinal Surg., Kobe Univ., Sch. Med.’)

P-1236 Analysis of genes induced by the co-culture of esophageal cancer cells with tumor associated macrophages
Himiko Kodaira1, Masayuki Doi1, Maiko Okamoto1, Nobuhide Higashino1, Masayoshi Hosono1, Yumi Ichihara1, Nobuhisa Takase1, Mari Nishio1, Manabu Shigeoka1, Yuichiro Koma1, Hiroshi Yokozaki1 (‘Div. Pathol., Kobe Univ., Grad. Sch. Med., ‘Div. Gastro-intestinal Surg., Kobe Univ., Grad. Sch. Med.’)

P-1237 Roles of macrophages in early squamous cell carcinogenesis of the esophagus
Yuichiro Koma1, Maiko Okamoto1, Masayuki Doi1, Nobuhide Higashino1, Himiko Kodaira1, Masayoshi Hosono1, Yumi Ichihara1, Nobuhisa Takase1, Mari Nishio1, Manabu Shigeoka1, Hiroshi Yokozaki1 (‘Div. Pathol., Kobe Univ., Grad. Sch. Med., ‘Div. Gastro-intestinal Surg., Kobe Univ., Grad. Sch. Med.’)

P-1238 CCL2 derived from both tumor-associated macrophage and esophageal cancer promotes cell migration of cancer cell
Maiko Okamoto1, Masayuki Doi1, Nobuhide Higashino2, Himiko Kodaira1, Masayoshi Hosono1, Yumi Ichihara1, Nobuhisa Takase1, Mari Nishio1, Manabu Shigeoka1, Yuichiro Koma1, Hiroshi Yokozaki1 (‘Div. Pathol., Kobe Univ., Grad. Sch. Med., ‘Div. Gastrointestinal Surg., Kobe Univ., Grad. Sch. Med.’)

P-1239 Loss of PAR-3 protein is associated with poor prognosis in esophageal squamous cell carcinoma.
Tomoko Kitachii1, Kohichiroh Yasui1, Naoyuki Gen1, Naoto Iwai1, Akira Tomie1, Nobuhisa Yama1, Osumu Dohi1, Kei Terasaki1, Yoshiho Ito1 (Molecular Gastroenterology and Hepatology Dept. Kyoto Prefectural Univ., Med.)

P-1241 The expression analysis of ZNF750 in human esophageal squamous cell carcinoma.
Ryo Otsuka1, Yasunori Akutsu1, Naoyuki Hanari1, Kentaro Murakami1, Masayuki Kano1, Masahiko Takahashi1, Yasunori Matsumoto1, Nobufumi Sekino1, Masaya Yokoyama1, Hisahiro Matsubara1 (Department of Chest Surgery, Kyoto Prefectural Univ., Med.)

P-1242 Roles of Anion Exchanger 1 in esophageal squamous cell carcinoma

P-1243 Expression of Signal peptide complex 18 is associated with poor survival of patients with esophageal cancer
Yui Yamamoto1, Naohide Ou1, Takeharu Imai1, Naoya Sakamoto1, Kazuhiro Sentani1, Hideki Ohdain1, Wataru Yasui1 (‘Dept. of Mol. Pathol., Hiroshima Univ., ‘Dept. of Gastroenterological and Transplant Surgery, Hiroshima Univ.’)

Chairperson: Hirooki Sasaki (Dept. of Translational Oncol., Natl. Cancer Ctr. Res. Inst.)

P14-7 Esophageal cancer (2)
Food cancer (2)
Chairperson: Hiroki Sasaki (Dept. of Translational Oncol., Natl. Cancer Ctr. Res. Inst.)

P14-8 Esophageal cancer (3)
Food cancer (3)
Chairperson: Yoshihumi Baba (Dept. of Gastroenterological Surg., Kumamoto Univ.)
P-1256 Impact of CDX2 expression status on survival of patients with curatively resected colorectal liver metastases
Yasuyuki Shigematsu, Hiroaki Kanda, Kentaro Inamura, Seiji Sakata, Yuichi Ishikawa (Dep. Path. Cancer Institute Hosp. of JFCR.)
CDX2 expression status has been reported to correlate with clinical outcome in colorectal cancer. However, the impact of CDX2 expression status on the survival of patients with curatively resected colorectal liver metastasis is not well understood. In this study, we analyzed the impact of CDX2 expression on the survival of patients with curatively resected colorectal liver metastasis.

P-1257 Nerve degeneration in the colon dilated due to the colonic neoplasms
Takadate1, Tomoya Abe1, Masamichi Mizuma1, Fumiyoshi Fujishima3, Miwako Haraguchi1, Naotsugu Haraguchi (Dept. of GE Surg., Grad. Sch. of Med., Osaka Univ.)
We investigated the histological changes of enteric nerve in the colon dilated due to the colonic neoplasms.

P-1258 Expression and distribution of SPC18 in colorectal cancer
Hiroyuki Hayashi2, Yoshiko Numata3, Isao Okayasu3, Azusa Yoneshige, Akihiko Ito (Dept. Pathol., Fac. Med., Tohoku Univ.)
SPC18 is a member of the SPC gene family and is expressed in epithelial cells. We investigated the expression and distribution of SPC18 in colorectal cancer.

P-1259 Colorectal cancer (2)
Chairperson: Taishi Hata (Dept. of Gastroenterological Surg., Grad. Sch. of Med., Osaka Univ.)
座長：畑 泰司（大阪大・医院・消化器外科）

P-1260 Colorectal cancer (3)
Chairperson: Naotsugu Haraguchi (Dept. of GE Surg., Grad. Sch. of Med., Osaka Univ.)
座長：原口 敬（大阪大・院医・消化器外科）

P-1261 Nuclear localized mutant p53 causes invasion and metastasis by drastic morphological changes of colorectal tumor gland.
Mizuho Nakayama1, Eri Sakai1, Kanae Ejichin2, Hiroko Oshima3, Taue Han, Kieko Ohki1, Atsushi Ochiai1, Dominic C. Voon1, Makoto Taketo1, Masanobu Oshina3, Tatsuyuki Haraguchi (Dept. Path., Cancer Institute Hosp. of JFCR.)
Nuclear localized mutant p53 causes invasion and metastasis by drastic morphological changes of colorectal tumor gland.
P-1268  Phosphoserine phosphatase (PSPH) is a novel candidate driver gene on chromosome 7 in colorectal cancer (CRC).

Kuniaki Saito, Qingjiang Hu, Shinya Kidogami, Tomoko Saito, Sho Nambara, Hisateru Komatsu, Hidenari Hirata, Shotaro Sakimura, Yohsuke Kuroda, Shinya Ito, Hideaki Eguchi, Takaaki Masuda, Koshi Mimori (Kyusyu University Beppu Hospital Department of Surgery)

PSPH is a tumor suppressor that exhibits regulatory functions in colorectal cancer and is used in tumor cell survival.
P-1281  
**Autocrine BMP-4 accelerates prostateseal degradation of Bim and protects colorectal cancer cells from apoptosis**

Yuichiro Yokoyama1, Shogo Ehata1, Toshiaki Watanabe1, Kohei Miyazono2 (Dept. Mol. Path., Univ of Tokyo, Grad. Sch. Med., Tokyo, Japan)

大腸癌細胞はBMP-4を自分泌して、Bimのプロテアーゼ依存的分解を促進することでアポトーシスを回避する。

横山雄一郎1, 上村和成2 (東京大・院医・消化器外科)

P-1282  
**Identification of tumor endothelium-related genes in colorectal cancer**

Akira Yuroz1, Eiichiro Yamamoto2, Akiko Tsuyada1, Yutaka Numata1, Katsuhiko Sakai1, Kenji Watanabe1 (Dept. Mol. Path. Oncol., Univ. of Tokyo, Tokyo, Japan)

腫瘍血管内皮関連遺伝子の同定

岩村 幸明1, 岡口 友宏2, 平田 聡3, 木本 信也1, 高橋 裕1 (東京大・院医・消化器外科)

P-1283  
**Disruption of colorectal cancer organoids promotes growth and stemness by activating WNT pathway.**

Takeshi Hagihara1, Piulats M Jose1, Hiroko Endo1, Hiroko Okuyama1, Takahiro Tashiro1, Yoshinori Sakai1, Masahiko Inoue1 (Dept. of Biochem., OMCC., Grad. Sch. of Med., Tokyo Univ., Tokyo, Japan)

大腸がんステラーを破壊する、WNT系の活性化と幹細胞性亢進

秋原 誠1, 井ノ口 洋人1, 藤澤 洋子1, 藤原 信三1, 松田 尚広1, 沼田 輔1 (大阪府立成人病センター研究所労働科学部, 京都大・消化器外科)

P-1284  
**The study on cancer stem cell-specific therapy through drug repositioning strategy.**

Na-Hee Lee1, In-Sun Hong2, Jeong-Seok Nam1, Ji-Young Kim1, Gyu-Beom Jang1, Se-Ra Park1, Hyun-Jin Kim1, Jae-Wan Kim1 (Dept. of Molecular Medicine, Gachon University, Seoul, Korea)

癌幹細胞を対象とする薬物再活用の戦略

池谷 潤記1, 鯖川 恵乃1, 河野 覆2, 井上 剛3 (大阪大・院医・消化器外科)

P-1285  
**Chemo-resistance regulatory factor CSF2 promote colorectal cancer stem cell property.**

Gyu-Beom Jang1, Ji-Young Kim1, Na-Hee Lee1, Se-Ra Park1, Jae-Wan Kim1, Hyun-Jin Kim1, Jeong-Seok Nam1 (Dept. of Molecular Medicine, Gachon University, Seoul, Korea)

CSF2が化学療法耐性を促進する

池谷 潤記1, 河野 覆2, 井上 剛3 (大阪大・院医・消化器外科)

P-1286  
**Drug repositioning for colorectal cancer stem cell therapeutics.**

SERA PARK1, Gyu-beom Jang1, Ji-Young Kim1, Na-Hee Lee1, Jae-Wan Kim1, Hyun-Jin Kim1, Jeong-Seok Nam1 (Dept. of Molecular Medicine, Gachon University, Seoul, Korea)

薬物再活用が大腸癌幹細胞治療への応用

池谷 潤記1, 河野 覆2, 井上 剛3 (大阪大・院医・消化器外科)

当院の肝機能不良（肝細胞死亡態）の肝細胞癌に対する腹腔鏡下肝部分切除術の治療成績

P-1293 Analysis of N-glycan alternation and invasiveness associated with α-PA expression in hepatocellular carcinoma cell-lines Hidenori Takahashi, Yoshiya Kamiyama, Takeshi Aiyama, Tatsuya Makino, Yoshinobu Saito, Ryotaro Sakamori, Tomohide Tatsumi, Shuji Tabara, Tetsuo Takehara (Dep. Gastroenterology and Hepatology., Osaka Univ.)

肝細胞癌細胞における糖鎖異常とα-PA 発現変化に伴う浸潤能の解析

P-1294 Continuous hepaticocyte apoptosis accelerates diethylnitrosamine-induced tumorgenesis in the liver Yasutoshi Nokazi, Hayato Hikita, Satoshi Tanaka, Yuta Myojo, Yuki Makino, Yoshinobu Saito, Ryotaro Sakamori, Tomohide Tatsumi, Tetsuo Takehara (Dep. Gastroenterology and Hepatology, Osaka Univ. Graduate School of Medicine)

肝細胞アポトーシスが持続する肝臓では、DEN 誘発性腫瘍形成が促進する

P-1295 Non-alcoholic steatohepatitis-related liver tumorgenesis is suppressed in mice lacking hepatic retinoid storage Yohei Shirakami, Kazuya Yasui, Toshiya Kamiyama, Akinobu Taketomi (Dept. Gastroenterology, AMC)

非酒精性脂肪肝炎関連肝腫瘍の発生が、肝臓にレチノイド受容体を欠失させたマウスにおいて抑制される

P-1296 High-throughput drug library screening for overcoming sorafenib resistance in hepatocarcinoma cell lines In Hyun Shin, Bora Oh, Jihyun An, Jihyun Song, Yoon-Chul Lee (Dept. of Gastroenterology, AMC)

研究目的: サロフェニブ耐性へpatocarcinoma細胞株に対して、高通量薬物ライブラリスクリーニングを実施した。結果: 抗腫瘍活性を示した化合物は、ビリーノの162番、ザラルミナの252番であった。結論: 本研究により、新たな治療マーカーの開発が可能である。
Different roles of lysophosphatidic acid receptors in cellular functions of pancreatic cancer cells

Koichi Ohishi, Takanori Izumi, Takeshi Tsuchiya, Kazuo Morishita, Takamitsu Sasaki

P-1307

Overexpression of nuclear karyopherin-alpha2 in cholangiocarcinoma correlates with poor prognosis and chemosensitivity

Mariko Tsukagoshi1, Kenichiro Araki1, Takahiko Yokobori1, Norio Kubo1, Akira Watanabe1, Takamichi Igarashi1, Norihiro Ishii1, Ken Shirabe1, Hiroki Sumiyoshi1, Yoshiharu Nakamura1, Akira Watanabe1, Takamichi Igarashi1, Norihiro Ishii1, Ken Shirabe1, Hiroki Sumiyoshi1, Yoshiharu Nakamura1, Akira Watanabe1, Takamichi Igarashi1, Norihiro Ishii1, Ken Shirabe1, Hiroki Sumiyoshi1, Yoshiharu Nakamura1

P-1308

DEVELOPMENT OF A NEW THERAPEUTIC APPROACH USING A THIRD GENERATION ONCOSTATIC HSV-1 FOR BILARY TRACT CANCER

Yoko Tateno1, Yasushi Ino1, Miwako Iwai1, Masaru Shinozaki2, Tomoki Todo1 (1Div. Innovative Cancer Therapy, Institute of Medical Science Hospital, Univ. Tokyo, 2 Dept. Surg., Institute of Medical Science Hospital, Univ.Tokyo)

P-1309

The overexpression of RAB5 in pancreatic cancer is associated with poor prognosis via E-cadherin suppression.

Takamiichi Igarashi1, Kenichiro Araki1, Takahiko Yokobori1, Altan Bolag1, Takahiro Yamanaka1, Norihiro Ishii1, Mariko Tsukagoshi1, Akira Watanabe1, Norio Kubo1, Masashiko Nishiyama1, Ken Shirabe1, Hiroaki Kawanami1 (Dept. Hepatobiliary & Pancreatic Surgery, Gunma Univ. Hosp., Dept. Mol. Pharmacology & Oncology, Gunma Univ., Grad. Sch. Med.)

P-1310

Overexpression of KIAA1199/CEMIP predicts poor prognosis in pancreatic cancer

Atsuhiro Koga, Norihiro Sato, Shiro Kohi, Nobutaka Matayoshi, Kazunori Shibao, Keiji Hirata (1st Dept. Surg., UOEH, Sch. Med.)

P-1311

Functional significance of KIAA1199 overexpression in pancreatic cancer

Shiro Kohi, Norihiro Sato, Atsuhiro Koga, Kazunori Shihao, Keiji Hirata (Department of Surgery1, University of Occupational and Environmental Health)

P-1312

Different roles of lysophosphatidic acid receptors in cellular functions of pancreatic cancer cells

Koichi Ohishi, Takanori Izumi, Takeshi Tsuchiya, Kazuo Morishita, Takamitsu Sasaki

P-1313

Plasma DNA genotyping using digital PCR for early detection of pancreatic cancer; 2nd report (UMIN000012810)


P-1314

Activation of laminin/integrin pathway is critical for the growth of pancreatic cancer as a potential diagnostic marker

Takashi Asada, Shingo Nakahata, Tomonaga Ichikawa, Tohru Kama, Kazuhiro Morishita (Div. Tumor & Biochem., Dept. Med. Sci., Univ. of Miyazaki)

P-1315

Physical properties of recombinant fusion protein drug targeting HIF-active cancers

Takehiro Itoh, Tetsuya Kadonozono, Thilong Ngoc Hoang, Takahiro Kuchimaru, Shinae Kondoh (Sch. of Life Sci. and Tech., Tokyo Inst. of Tech.)

P-1316

The sensitization for gemcitabine-resistant pancreatic cancer cells with valpronic acid

Yasuhiro Kuramitsu, Yufan Wang, Kazuhiro Tokuda, Byron Baron, Takao Kinagawa (1st Dept. Biochemistry, Yamaguchi Univ., Sch. Med.)

P-1317

Suppression of STAT5b in pancreatic cancer cells leads to sensitization for gemcitabine-resistant pancreatic cancer cells

Kazunori Shibao, Keiji Hirata (1st Dept. Surg., UOEH., Sch. Med.)

P-1318

Mast3 is associated with gemcitabine resistance of pancreatic ductal carcinoma

Takamitsu Sasaki1, Rina Fujiwara2, Yi Luo2, Yoshiyuki Dohara2, Satoshi Shinya1, Dai Syu Kato1, Yobi Shiwaku1, Hiroki Kuniyasuy1, Kyoji Shinohara1, Yoshihisa Sai1, Tatsuo Tsuchiya1, Kazuhiro Morishita1, Kazuo Morishita1, Takehiko Yokobori1, Norihiro Ishii1, Ken Shirabe1, Hiroki Sumiyoshi1, Yoshiharu Nakamura1, Akira Watanabe1, Takamichi Igarashi1, Norihiro Ishii1, Ken Shirabe1, Hiroki Sumiyoshi1, Yoshiharu Nakamura1

P-1319

Suppression of STAT5b in pancreatic cancer cells leads to sensitization for gemcitabine-resistant pancreatic cancer cells

Kazunori Shibao, Keiji Hirata (1st Dept. Surg., UOEH., Sch. Med.)

P-1320

Different roles of lysophosphatidic acid receptors in cellular functions of pancreatic cancer cells

Koichi Ohishi, Takanori Izumi, Takeshi Tsuchiya, Kazuo Morishita, Takamitsu Sasaki
P-1319 Putative role of glycosyn synthase kinase (GSK)-3β in acquired resistance to chemotherapeutic pancreatic cancer

P-1320 Intraperitoneal interaction between tumor-associated macrophages and pancreas cancer by visual assistance of TelomeScan

P-1321 Evaluation of fatty infiltration of the pancreas by area-based measurement on CT images in a correlation with histology

P-1322 Investigation of factors affecting exosome dynamics in pancreatic cancer cells.

P-1323 High plasma programmed cell death ligand 1 is prognostic of reduced survival in advanced lung cancer
Yusuke Okuma, Yukio Hosomi, Kie Mirokiji, Kageaki Watanabe, Yoshio Nakahara, Satoshi Takahashi, Yukiko Sagawa, Sadamu Homma (Div. of Oncology, The Jikei Univ. Sch. Med., Dept. of Thoracic Oncology, Tokyo Metropolitan Komagome Hospital, Dept. of Respiratory Medicine, Kitasato Univ., Dept. of Respiratory Medicine, Nippon Med. Univ.)

P-1324 B7-H3 (CD276) protein expression, smoking history, and patient survival in lung adenocarcinoma

P-1325 Role of TIM-3/Galectin-9 pathway in lung adenocarcinoma
Yoshihiro Ohue, Koji Kurose, Yumi Nishio, Midori Isobe, Mikio Oka, Eiichi Nakayama (Kawasaki Medical School)

P-1326 MicroRNA-21 induce the cancer associated fibroblast phenotype in lung adenocarcinoma.

P-1327 Amyloid precursor protein in human lung adenocarcinoma Shigehiro Ito, Yasuhiro Miki, Ryoko Saito, Hiroburo Sasano (Dept. of Anatomic Path., Tohoku Univ., Grad. Sch., Med., Dept. of Disaster Obstetrics & Gynecol., IRIDESTohoku Univ.)

P-1328 Upregulation of S100A10 is associated with poor prognosis in lung adenocarcinoma

S100A10の高発現は、肺癌の悪性度を示す無核蛋白である。


ACTN4の発現は早期期癌がんにおける術後化学療法の有効性を予測するバイオマークである。

P-1330 The association of monocytes in primary tumors and peripheral monocyte counts in non-small cell lung cancer patients
Cheng-long Huang, Tatsuya Hirai, Ryuya Sumitomo (Dept. Thorac. Surg., Kitano Hospital)
非小細胞肺癌患者における腫瘍内単球数と末梢血液単球数との関連

P-1331 The role of cancer associated fibroblasts (CAFs) in NSCLC
Chihiro Inoue, Ryoko Saito, Yasuhiro Miki, Shuko Hata, Hiroburo Sasano (Dept. of anat. pathol., Tohoku univ., Grad. Sch. Med.)
非小細胞肺癌における癌関連線維芽細胞の役割

P-1332 The association of monocytes in primary tumors and peripheral monocyte counts in non-small cell lung cancer patients
Cheng-long Huang, Tatsuya Hirai, Ryuya Sumitomo (Dept. Thorac. Surg., Kitano Hospital)
非小細胞肺癌患者における腫瘍内単球数と末梢血液単球数との関連

P-1331 The role of cancer associated fibroblasts (CAFs) in NSCLC
Chihiro Inoue, Ryoko Saito, Yasuhiro Miki, Shuko Hata, Hiroburo Sasano (Dept. of anat. pathol., Tohoku univ., Grad. Sch. Med.)
非小細胞肺癌における癌関連線維芽細胞の役割
P-1332 Liquid biopsy using digital PCR for early- and advanced-stage lung cancer
Yusuke Uno1, Takaaki Sasaki1, Ryuohei Yoshida2, Kiyohiro Ando3, Noriko Motoi1, Hironori Tanaka1 (1Dept. Thoracic Surgery, Kitano Hospital, Osaka, Japan)

P-1333 Relationship between intratumoral expression of TS and RR1 and tumor proliferation in non-small cell lung cancers
Ryota Sumimoto1, Tatsuya Hirai2, Cheng-long Huang1 (1Dept. Thoracic Surgery, Kitano Hospital, Osaka, Japan)
2Department of Respiratory Medicine, The University of Tokyo, Japan)

P-1334 Phase II study of erlotinib in advanced non-small cell lung cancer patients with leptomeningeal metastasis

P-1335 The correlation of MMP-1 expression with EGFR-TKI resistance and clinicopathological factors in pulmonary adenocarcinoma

P-1336 Inactivating mutations of the NKK2-1 gene in non-TRU-type lung cancer identification through histology-driven approach

P-1337 The anti-proliferation activity of GPR87-suppressing adenoviral vector in the human lung cancer cell lines

P-1338 Comprehensive cancer-stroma interactions analysis of lung adenocarcinoma xenografts.
Yoshitomo Taichi1, Daisuke Sashida2, Toshio Niki3, Daisuke Komura1, Ishikawa Shumpei1 (1Dept. Integrative Pathol., 2Jichi Med. Univ., 3Dept. Genomic Pathol., Medical Research Institute Tokyo Medical and Dental Univ.)

P-1339 Molecular analysis of two cases with the EML4-ALK fusion positive squamous cell carcinoma components.
Hironori Ninomiya1,Kentaro Inamura1, Makoto Nishio1, Sakae Okumura1, Yuichi Ishikawa1 (1Dept. Pathol., The Cancer Inst., JFCR, 2Thoracic Oncol. Center, The Cancer Inst. Hospital, JFCR)

P-1340 Transcriptome Analysis of Small Cell Lung Cancer
Masafumi Horie1, Akira Saito1, Takahide Nagase1 (Division for Health Service Promotion, The University of Tokyo, 2Department for Respiratory Medicine, The University of Tokyo)

P-1341 Phase II study of induction CBDBA+CPT11 and sequential radiotherapy for elderly patients with LD-SCLC (TORG0604)

P-1342 Lymphoblastin B is associated with the development of resistance to pemetrexed in lung cancer.

P-1343 EBUS-TBNA as a promising method for evaluation of tumor PD-L1 expression in lung cancer
Rie Sakakihara1, Kentarou Inamura1, Noriko Motoi1, Hironori Ninomiya1, Sakae Okumura1, Makoto Nishio1, Yuichi Ishikawa1 (1Div. Pathol., The Cancer Inst. JFCR, 2Thoracic Oncol. The Cancer Institute Hospital, JFCR)

P-1344 The interaction between epithelial cells and fibroblasts via extracellular vesicles in smoking-related lung diseases
P-1345 Development of anti-tumor peptide for lung cancer therapy

P-1346 Comparison of orthotopic and heterotopic graft models using a cell line derived from metastatic pulmonary adenocarcinoma

P-1347 PAI-1 plays an important role in lung cancer progression
Kazunori Takamura1, Noboru Hattori1, Yasushi Horimasu1, Kazunori Komatsu2, Fumiko Chiwaki2, Yusuke Kobayashi1, Kouji Banno1, Daisuke Aoki1, Teruhiko Yoshida1, Hiroki Sasaki1 (*Dept. of OB/GYN, Keio Univ. Sch. of Med., **Dept. of Translational Oncology, Natl. Cancer Ctr. Res. Inst.)

P-1348 Phosphoproteomic analysis of EGFR/ALK-negative lung adenocarcinoma
Satoshi Okada1, Hiromasa Takahashi1, Ken Sanada1, Akira Fujii1, Hideki Sato1, Tatsuya Sugimoto1, Yasushi Horimasu1, Kazunori Komatsu2, Fumiko Chiwaki2, Yusuke Kobayashi1, Kouji Banno1, Daisuke Aoki1, Teruhiko Yoshida1, Hiroki Sasaki1

P-1349 The Codon 389 Polymorphism of PICT-1 is a Risk Factor for Uterine Cervical Cancer via the degradation of p53 protein
Yuuki Nishimoto1, Kenjiro Nakasima1, Takuya Kakehashi1, Yusuke Sato1, Norihito Sugimoto1 (Nagato general hospital, Yamagata Med.Univ.)

P-1350 Decreased CEBP1 expression enhances malignant behaviors through EMT and promotes tumorigenesis in cervical cancer.
Yuuki Nishimoto, Kenjiro Nakasima, Takuya Kakehashi, Yusuke Sato, Norihito Sugimoto (Nagato general hospital, Yamagata Med.Univ.)

P-1351 Biological implication of cytoplasmic ECT2 in malignant progression of lung adenocarcinoma
Zeinab M Kobiabati1, Yoshio Murata1, Yuki Minami1, Masayuki Noguchi1 (Graduate School of Comprehensive Human Sciences, University of Tsukuba, Ibaraki, Japan., **Dept. of Pathology, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan.)

P-1352 SIM2 enhances sensitivity against oxidative stress and suppresses tumor growth in cervical cancer
Kanako Nakamura1, Masayuki Komatsu2, Fumiko Chiwaki2, Yusuke Kobayashi1, Kouji Banno1, Daisuke Aoki1, Teruhiko Yoshida1, Hiroki Sasaki1 (*Dept. of OB/GYN, Keio Univ. Sch. of Med., **Dept. of Translational Oncology, Natl. Cancer Ctr. Res. Inst.)

P-1353 USP15 Inhibits HPV16 E6 Degradation but Catalytically Inactive USP15 Reduces It’s Activity
Aoi Tokuda, Masafumi Yoshimoto, Yuji Yaginuma (Dept. Oncology, Graduate School of Medicine, Kurume University) USP15 is HPV16 E6 antagonist and E6 interact with the protein to suppress tumor growth in cervical cancer.

P-1354 The histone methyltransferase EZH2 is a potential therapeutic target for endometrial cancer
Shinya Oki, Kenbun Sone, Katsutoshi Oda, Akira Nishijima, Makoto Takeuchi, Agapiti Chuwa, Kayo Asada, Chaminami Makii, Kei Kawana, Yutaka Osuga, Tomoyuki Fujii (Department of Obstetrics and Gynecology, the University of Tokyo)

P-1355 Targeted bisulfite sequencing using peripheral blood of patients with CIMP-high endometrial cancer
Megumi Yanakura1, Kouji Banno1, Masatake Adachi1, Kiyoko Umene1, Yusuke Kobayashi1, Wataru Yamagami1, Eiichiro Tominaga1, Nobuyuki Susumu1, Daisuke Aoki1 (*Dept. Ob & Gy., Keio Univ. Sch. of Med., **Univ. Tsukuba, Grad. Sch., Biol. Sci.)

CIMP-H子宮体癌患者の末梢血を用いたTargeted bisulfite sequencing
矢野倉悠1, 飯沢浩司1, 安達将隆1, 梅根紀代子1, 小林拓也1, 山上亘1, 高永史一郎1, 魯川伸1, 青木大輔1 (慶應義塾大学・産婦人科, 筑波大・院・生物科学)
Expression of NOTCH pathway genes in SP cells from endometrial cancer cells using a violet laser diode.


Violet Laser Beamを用いて分画した子宮体癌SP細胞におけるNOTCHシグナル伝達遺伝子の発現

P-1359 Additional value of telomerase activity for improvement of cytological diagnostic accuracy in abnormal cervical lesions

Disparities in the incidence of HPV 16/18 infections among young females depending on an unfortunate year of birth

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P-1359 Additional value of telomerase activity for improvement of cytological diagnostic accuracy in abnormal cervical lesions

Disparities in the incidence of HPV 16/18 infections among young females depending on an unfortunate year of birth
15 Diagnosis

P15-1 Pathological diagnosis

Chairperson: Yoshinao Oda (Dept. of Anatomic Pathol. Grad. Sch. of Med. Sci., Kyushu Univ.)

座長: 小田 眞義 (九州大・院内・形態機能病理)

P-1376 Re-classification of rhabdoid tumor: three subtypes of rhabdoid tumor according to their histological features
Kenichiro Kashiwagi, Yuki Matsumoto, Hironori Kato, Kiyoshi Shihomi, Yukihiro Katsuragawa, Kenjiro Tanaka, Takehiko Yabu, Hiroshi Kishimoto, Yoshinori Oda

P-1377 Low molecular weight keratin, CAM5.2, immunoreactivity in squamous cell carcinoma of various organs

P-1378 Development of a 4,6-diaryl-3-cyano-2-pyridinone derivatives as a survivin targeting SPECT probe for tumor imaging
Takeshi Fuchigami, Natsumi Ishikawa, Tatsuya Mizoguchi, Mamoru Harakate, Kounosuke Itagaki, Sakura Yoshida, Moriko Nakayama

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P14-29 Ovarian cancer (2)

Chairperson: Nobuyoshi Hiraoka (Div. of Pathol., Natl. Cancer Ctr., Hosp.)

座長: 平谷 伸介 (国立がん研究センター・中央病理)

P-1371 Profiling of human ovarian cancer xenosomes using comprehensive microRNA analysis.
Horie Kayo, Nanashima Naoki, Yokoyama Yoshitomi, Watanabe Jun

P-1372 Elevated level of serum miR-99a is correlated with serious epithelial ovarian cancer and can be a potential biomarker.

P-1373 STAT3 pathway of ovarian cancer cells and M2 macrophages in cancer microenvironment are inactivated by Oninonin A

Oninonin A by おる卵巣癌細胞と癌微小環境のM2マクロファージのSTAT3活性の制御
坪木 純子, 瀧野 薫, 高石 清美, 努藤 文彦, 本原 剛志, 坂口 眞, 高木 宏明, 浅尾 元宏, 片渕 秀隆 (熊本大・医・産科婦人科, 熊本大・医・細胞病理学, 熊本大・医・母子看護学)

P-1374 EMT-related gene Snail promotes MDSC chemotaxis in ovarian cancer via CXCR2
Mano Taki, Kaoru Abe, Tsukasa Baba, Junzo Hamamishi, Ken Yamaguchi, Naoko Horiwaka, Ikuo Konishi, Noriomi Matsumura (Dept. Ob & Gyn., Kyoto Univ., Dept. Ob & Gyn., National Hospital Organization Kyoto Medical Center.)

卵巣癌においてEMT誘導因子SnailはCXCR2を介してMDSCの腫瘍への浸潤を促進する
海 喜多, 安田 郁, 塩場 彌, 關西 雅, 山崎 建, 嶋崎 留美, 小西 和生, 佐々木 聡 (京都大学・医・産婦人科, 京都医療センター, 産婦人科)

P-1375 SIRT1 plays a role in the acquisition of aggressiveness and chemo-resistance of ovarian carcinoma cells
David H. Myung, Tsutomu Miyamoto, Ryoichi Asaka, Hirofumi Ando, Yasushi Yamada, Sotaro Higuchi, Koichi Ida, Hisanori Kobara, Hiroyasu Kashima, Tanri Shizozawa (Department of Obstetrics & Gynecology, Shinshu University Graduate School of Medicine)
17  Chemotherapy and endocrine therapy

P17-1 Natural substances (1)

Chairperson: Kanzuo Shino-ya (BBD, AIST)
座長: 新家 一男（産総研・創薬基盤 最先端バイオ技術探求）

P-1379 Paeonol aciden and paeonol acid show preferential cytotoxicity under nutrient-deprived conditions. 

P-1380 Development and utilization of bioenergetic profiling system for drug discovery
Yushi Futamura, Harumio Aono, Makoto Kawatani, Makoto Murao, Hiroyuki Osada (Chemical Biology Research Group, RIKEN CSRS)

P-1381 Taheebo tea suppresses the growth of human endometrial carcinoma in xenograft model.
Hirofumi Ando (Dept. Clinical Oncol., Akita Univ. Graduate Sch., Med.)

P-1382 p53-dependent growth suppression of cancer cells by coccoquinones

P-1383 Rats suppresses growth of malignant pleural mesothelioma.

P-1384 Mammea E/BB induces cell apoptosis in human leukemic cell lines
Merethe Rungrojakkul1, Aroonchai Saleai2, Chadarat Ampasavate1, Siriporn Okonok1, Colleen A. Sweeney3, Songyot Anuchapreeda1 (Dept. of TCM. Alternative Med. College, Chandrakasem Rajabhat Univ., Thailand, Dept. of Chemistry, Chiang Mai Univ., Thailand, Dept. of Pharm. Sci., Chiang Mai Univ., Thailand, Dept. of Biochem & Mol., UC Davis School of Med., USA, Dept. of Med. Tech. Chiang Mai Univ. Thailand)

P-1385 Bacilein induces cell cycle arrest in nasopharyngeal carcinoma
Thana Narkthong1, Tawan Janvilsrit1, Supeecho Kumkate1, Alisa Dammernsawad1 (Dept. of Biochem., Mahidol Univ., Dept. of Biol., Mahidol Univ.)

P-1386 Nobiletin and 5-demethylnobiletin suppress c-KIT expression via ERK pathway and inhibit cell proliferation in AML cells
Pei-Yi Chen1, Yu-Ting Chen2, Reuy-Ho Kao1, Ming-Juan Wu, Mi-Hueh Tai1, Chi-Tang Ho1, Jui-Hung Yen1 (Dept. of Medical Genetics, Buddhist Tzu Chi General Hosp., Taiwan)

P-1387 Therapeutic effect of a new curcumin analog on cutaneous T cell lymphoma, and its mechanism

P-1388 Epidemiological study of glycogenosis inhibition by 2-deoxyglucose on the protein expression in the pancreatic cancer cell line

P-1389 Antimotic effect and Complex of Non-motitic effect on Tumor Biology of Erubilin Mesilate in Soft Tissue Sarcoma Models

P-1390 Mechanism of anti-cancer effects induced by benznidazoles

P17-3 Synthetic anticancer compounds (1)

Chairperson: Manabu Kawada (Inst. Microbial Chem. Lab. Oncology)
座長: 川田 学 (微生研 第1生物活性)

P-1389 Mechanism of anti-cancer effects induced by benznidazoles
P17-4 Synthetic anticancer compounds (2)

Chairperson: Takeo Usui (Faculty of Life & Environmental Sciences, Univ. of Tsukuba)
座長：臼井 健郎(筑波大・生命環境)

P1392 Studies on the creation of novel anticancer drugs targeting nicotinamide phosphoribosyltransferase
Kiyotaka Katsuragi1, Yoko Ogino1, Akira Sato1, Takahiro Oyama3, Hideaki Abe1, sei-ichi Tanuma1 (Fac.of Pharm.Sci., Tokyo Univ.of Sci., 2Genome and Drug Res. Ctr., Tokyo Univ. of Sci., 3Hinoki shinya co., Ltd)

Nicotinamide phosphoribosyltransferase を標的とした新規抗癌剤の創薬研究

P1394 Elucidation of anti-mesothelioma effect of vitamin E derivatives through histone modification

ヒストン修飾を介したビタミンE薬剤の抗中皮膚癌作用の解明

P1395 Design, synthesis and biological evaluation of Triostin A and its analogues
Kota Kojie1, Tasuku Hiramaya1, Kensa Kusakai1,2, Hideko Naga-ma1,2, Makoto Okumura1 (Dept. Pharm. & Med. Chem., Faculty Med., Fukuoka Univ., 2 Sch. Pharm. Sci., Chiba Univ., Japan)

トリオステンA及びその類似体の合成と生物活性評価

P1396 PAI-1 (plasminogen activator inhibitor 1) as a therapeutic target for ovarian cancer
Erika Nakatsuka1, Kenjiro Sawada1, Koji Nakamura1, Akihiko Yoshishima1, Yasuto Kinos1, Seiji Maebuchi1, Akiko Itai4, Tadashi Kimura1 (Dept. Ob-Gyn., Osaka Univ., 1MMD Inc., Tokyo, Japan)

P1397 Targeting the EWS-FLI1 fusion gene by pyrrole-imidazole polyamide DNA alkylation in Ewing sarcoma cells

EWS-FLI1 混合遺伝子を標的としたピロイルミダゾールポリアミド DNA 銀塩剤の研究：Waring Ewing 癌の治療戦略

P1398 Therapeutic effects of hybrid liposomes against mouse model of colorectal cancer in vivo due to long term accumulation
Hideaki Ichihara1, Masaki Okumura1, Yoko Matsumoto1 (Div. of Applied Life Science, Sojo)

大腸がんモデルマウスに対するハイブリッドリポソームの長期間蓄積による治療効果

P1399 Mechanisms of different sensitivities of cancer cells against suppression of de-poly(ADP-ribosylation)
Kusuke Takai1, Akira Sato1, Hideaki Abe1, Takahiro Oyama1, Sei-ichi Tanuma1 (Fac. Pharm. Sci., Tokyo Univ. of Sci., 2. Genome & Drug Res. Ctr., Tokyo Univ. of Sci., 3 Hinoki shinya co., Ltd)

ポリ(ADPリボース)分解抑制に対するがん細胞の感受性の差異メカニズム

P1400 Nonactin exhibited synthetic lethality with β-catenin mutation via DRS5 signaling
Yuki Shikata1, Masaki Kiga1, Etsu Tashiro1, Masaya Imoto (Dept. of Biosci. & Bioinf., Fac. of Sci. & Tech., Keio Univ.)

ミトコンドリア脱共役薬ノナクチンによるβ-catenin 異常がんに対する合成致死誘導機構解析

P1401 Mechanisms of anticancer drug effect on sonodynamic therapy in combination with DEG and microbubbles
Hirotomo Shibaguchi1, Naoto Shirasu1, Motomu Kuroki1, Shin’ichi Yasunaga1 (Dept. Biochem., Faculty Med., Fukuoka Univ., 2. Sch. Nursing, Faculty Med., Fukuoka Univ.)

がん超音波治療法における超音波波動物性 DEG と凝固剤 microbubble の相乗による抗癌効果の作用機序

P1397 Macrolides Block Autophagy Flux and Cause Cell Death under Amino Acid-Depleted Condition in Head and Neck Cancer Cells
Kazukihiro Hirasawa2, Shota Motoya1, Kana Miyahara2, Masaki Hiramato2, Kiyoko Tsukahara1, Keisuke Miyazawa1 (Dept. of Otolaryngol., Tokyo Med. Univ., Tokyo, 2. Dept. of Biochem., Tokyo Med. Univ., Tokyo, Japan, 3. Dept. of Breast Oncol., Toho Med. Univ., Tokyo, Japan)

アミノ酸飢餓状態下で、マクロライド系抗菌薬はオートファジーの抑制により頭頸部癌細胞の細胞死を誘導する
P-1402 Essential role of oxaloacetate and autophagy in L-asparaginase-treated acute lymphoblastic leukemia cells
Hiroyoshi Takahashi1, Jun Inoue1, Kimiyoshi Sakaguchi1, Masatoshi Takagi1, Shuki Mizutani1, Johji Inazawa1 (1Dept. Mol. Cytogenet., Tokyo Medical and Dental Univ., 2Dept. Pediatr., Hamamatsu Univ. Sch. Med., 3Dept. Pediatr., Tokyo Medical and Dental Univ.)
急性リンパ性白血病細胞におけるL-asparaginase投与時のオキサアセタートとオートファジーの役割
高橋 幹吉1, 井上 理1, 坂口 公雅1, 髙木 正雄1, 水谷 修紀1, 糸澤 清治2 (1東京医科歯科大学・分子細胞遺伝, 2洪森医科大学・小児科, 3東京医科歯科大学・小児科)

P-1403 Dclk1 positively regulates gemcitabine-induced Chk1 phosphorylation in human pancreatic cancer cells
Daichi Kawamura, Yoshihiro Takemoto, Arata Nishimoto, Naruji Kugimiyaw, Junichi Murakami, Kazuhiro Ueda, Kimikazu Hamano
(Department of Surgery and Clinical Science, Yamaguchi Univ.)
ヒト膵癌細胞においてDclk1はゲムシタビン誘導性のChk1リン酸化を正に制御する
河村 大智, 佐藤 栄宏, 西本 新, 釘宮 成二, 村上 順一, 上田 和弘, 濱野 公一 (山口大学大学院医学系研究科臨床外科学)

P-1404 Numerical simulation to analyze the cancer status and to predict the effect of anticancer drug from 2D angiography image
Katsuya Nagayama1, Ichiro Miura2,3 (1Kyushu Institute of Technology, 2Obihiro asso. Hospital Dep. of Pathology, 3Juntendo Univ. human body pathology)
2Dがん画像からの数値シミュレーションによる状態分析と抗がん剤治療の効果予測
永山 勝也1, 三浦 一郎2 (九州工業大学, 3帯広協会病院 病理診断科, 3順天堂大学 人体病理病態講座)

P-1405 The novel anthraquinone derivative ATQ induces death of PC3 cells through SIRT 1-dependent pathways
Chin-Chia Hsu (Dept. of Life Sci., TCU)

P-1406 Induction of autophagy by Momordica charantia via the sirtuin 1-mediated pathways in breast cancer cells
Yosi-Ying Lin (Dept. of Life Sci., TCU)